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statement for the

MISSOULA

Montana Department of Transportation

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# Orange Street Bridge and Riverfront Access Project

STPU 8107(10)

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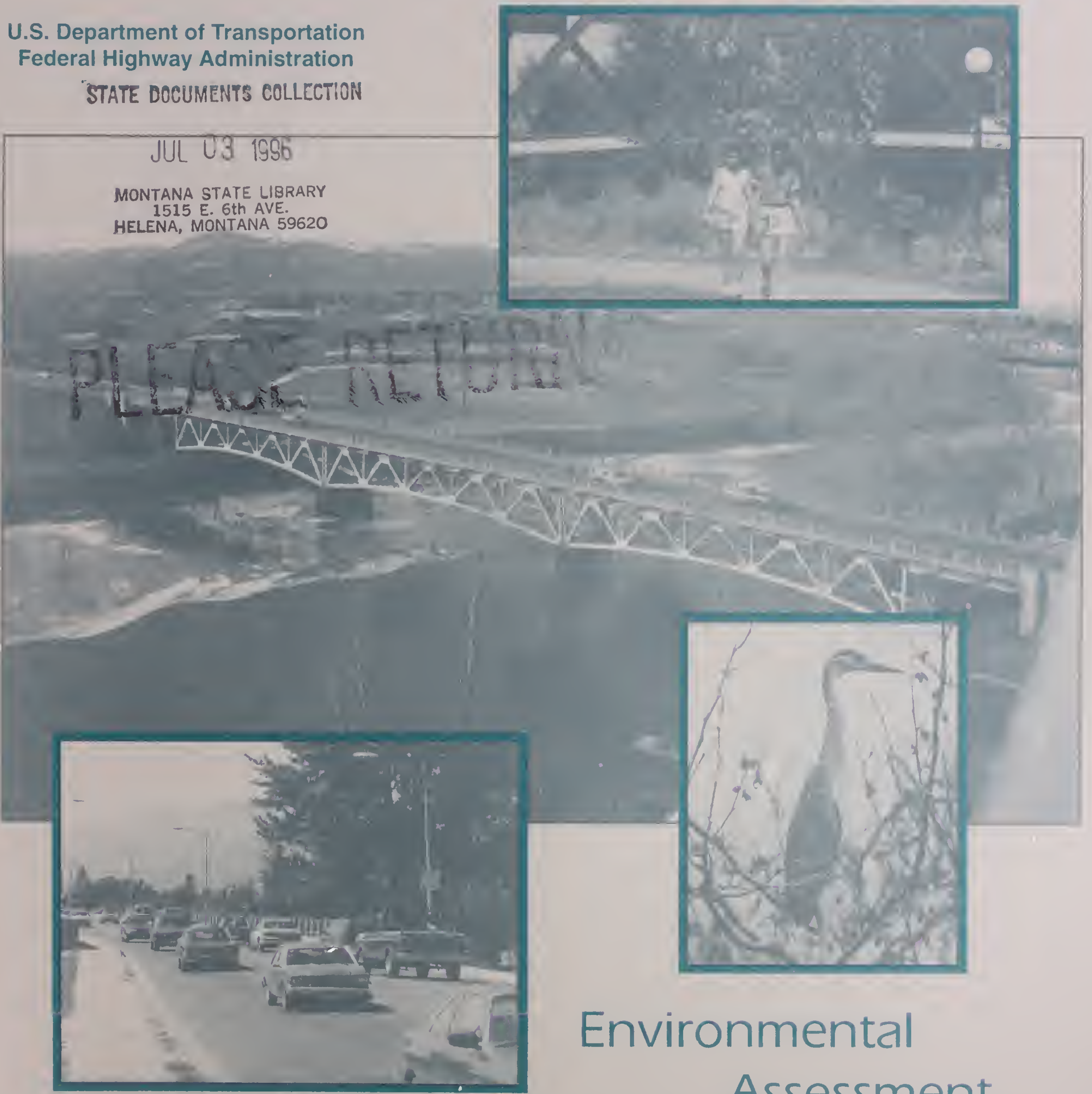

# Environmental Assessment

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# ENVIRONMENTAL ASSESSMENT
and
# Programmatic 4(f) Statement
for the

## CITY of MISSOULA
## ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT
State Project STPU 8107(10)
City Project No. 93-073
**Control No. 2462**

Submitted Pursuant to 42 U.S.C. 4332(2)(c)
and Executive Order 11988

by the

CITY of MISSOULA

and

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

and

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 8

Director of Public Works, City of Missoula — Date: 2/21/96

Montana Department of Transportation — Date: 4/8/96

Document reviewed for content
and Approved for Circulation by:

Federal Highway Administration — Date: 4-16-96

This document is prepared in compliance with the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA).

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We would also like to gratefully ackowledge the hard work of our Stakeholder Concept Teams that assisted us throughout this project. With their help, the following was conscientiously accomplished for the project using public comment and stakeholder input:

- generated and refined ideas
- identified and crystallized project issues and concerns
- assisted in developing and reviewing alternative concepts
- assisted in developing alternative selection criteria
- assisted in assigning weights to these criteria

The following members of our community gave of their personal time to participate on a Stakeholder Concept Team for the project:

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# SECTION 1. DESCRIPTION OF PROPOSED ACTION

## 1.1 Description of the Project

City of Missoula, in conjunction with the Montana Department of Transportation (MDT) is proposing a Federal-Aid Project to modify the Orange Street Bridge and approaches to connect with the 5-lane roadways on each end of this short section of narrow 2-lane urban highway with considerations for pedestrian and bicycle traffic and access to the Riverfront Trails system.

The proposed project, known as the Orange Street Bridge and Riverfront Access Project STPU 8107 (10), is located on Orange Street at the Clark Fork River crossing in the center of the City of Missoula, Montana. The project vicinity is shown on ***Figure 1***. The project location is shown on ***Figure 2***.

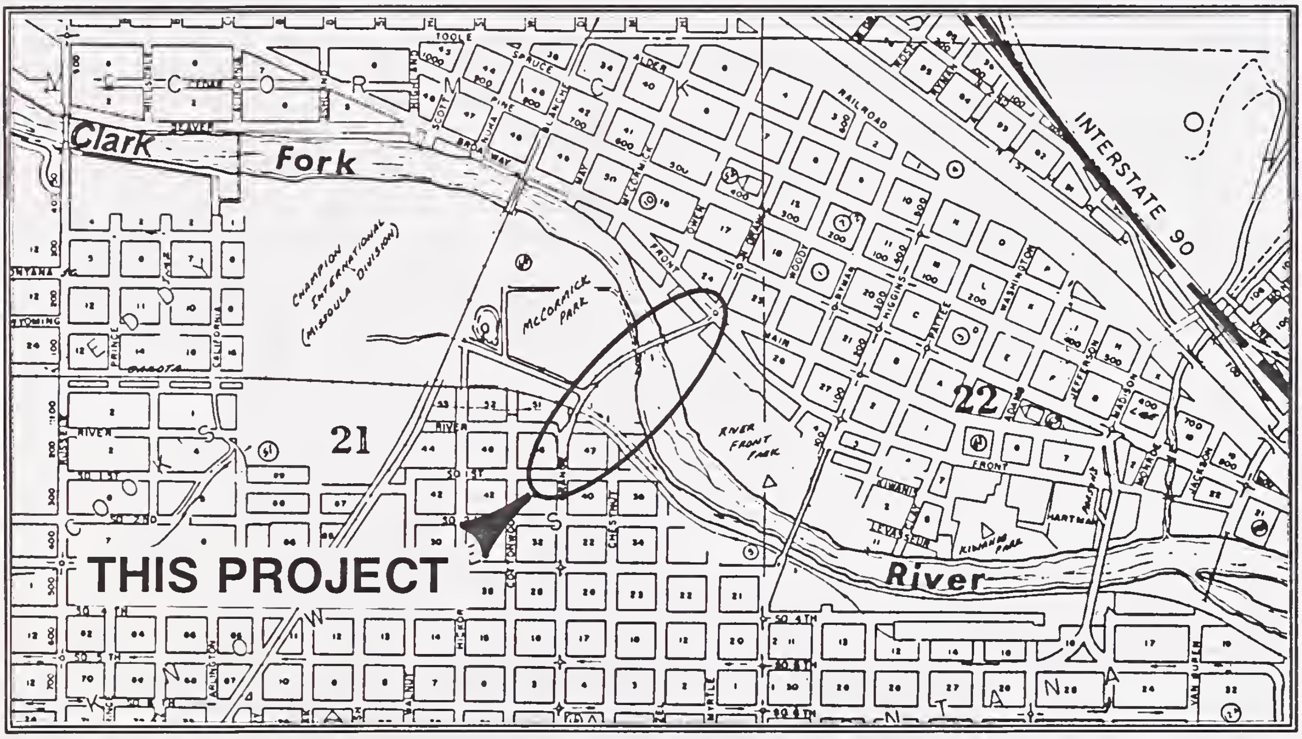


**Figure 1 Project Vicinity**

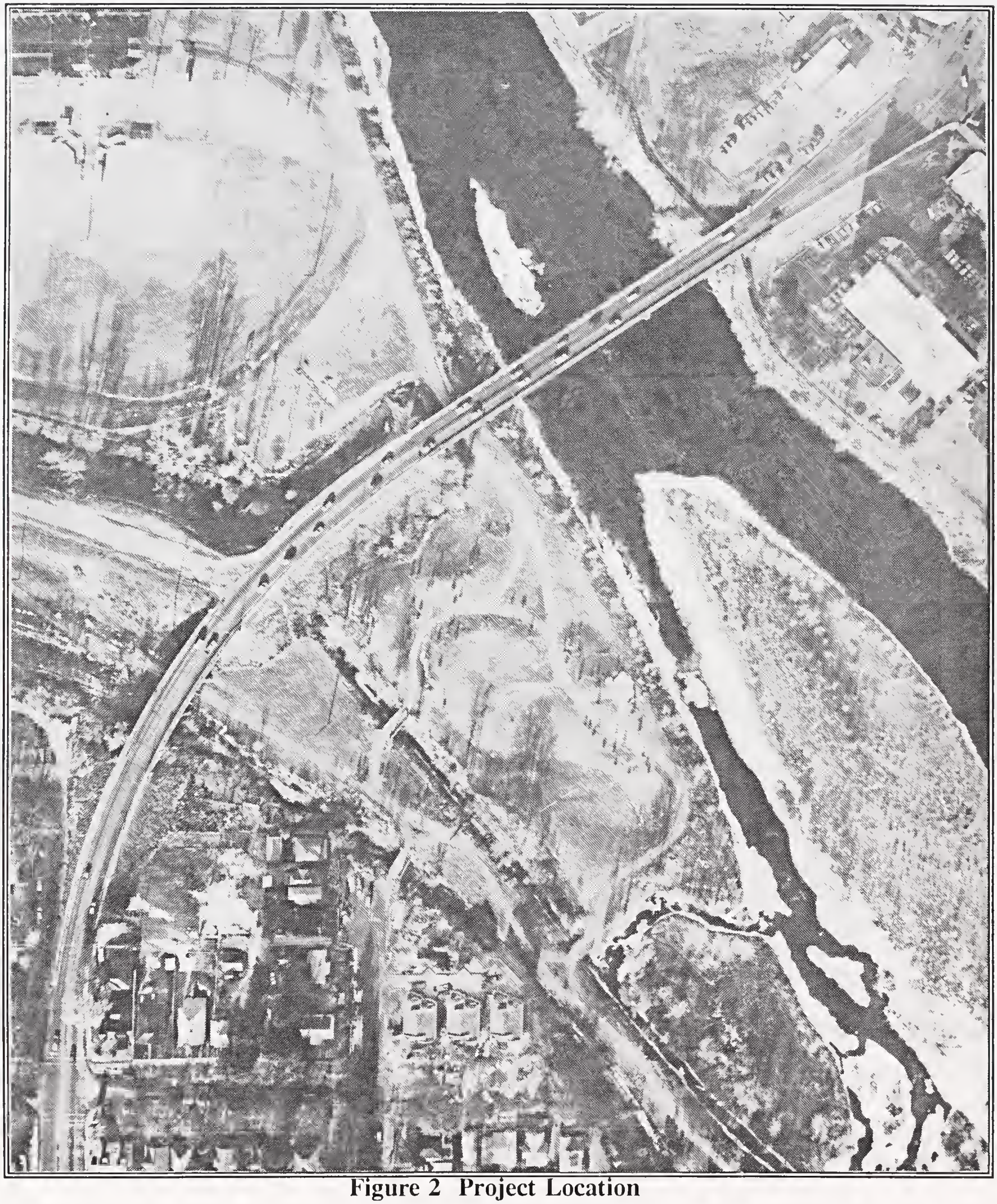


Figure 2 Project Location

Orange Street is currently designated as urban highway STPU 8107 and is also designated as U.S. 93 Business Route. It was previously known as U.S. 93 until the completion of the Reserve Street widening project. The U.S. 93 designation was transferred to Reserve Street in July, 1993.

The proposed action will involve the removal of the current 2-lane bottleneck on Orange Street with the modification of the river crossing bridge and the addition of pedestrian and bicycle accomodations for access to the riverfront trail system. The proposed roadway will be a 23.77 meter (78 foot) to 26.82 meter (88 foot) wide urban highway with four traffic lanes, bicycle lanes and separated sidewalks on each side and a turning lane where necessary as shown in the typical sections on ***Figure 3*** on the following page. The typical section for the existing bridge is also shown.

The horizontal and vertical alignment will meet the requirements of a 64 km/h (40 mph) design speed as outlined by City of Missoula and the Montana Department of Transportation.

Proposed project improvements will include grading, structure removal, new structures, surface drainage, plant mix surfacing, utility improvements, trails and park connections, upgrading existing road approaches, a possible future signalized intersection at Cregg Lane, bus turnouts, signing, right-of-way acquisition, landscaping and other miscellaneous features.

## 1.2 Affected Environment

The proposed project is located in the heart of the City of Missoula at the Orange Street crossing of the Clark Fork River. The majority of the Orange/Stephens street corridor is a 5-lane facility. The only remaining sections of 2-lane roadway along this corridor from Brooks Street to the Interstate 90 Interchange is a 548 meter (1800 foot) section between First Street and Front Street (this project) and a 457 meter (1500 foot) section from Alder to the Interstate 90 Interchange.

Both of these areas provide bottlenecks to the traffic primarily due to the structures on the roadway. The proposed project section has the Orange Street Bridge at the Clark Fork River crossing ***(Figure 4)***

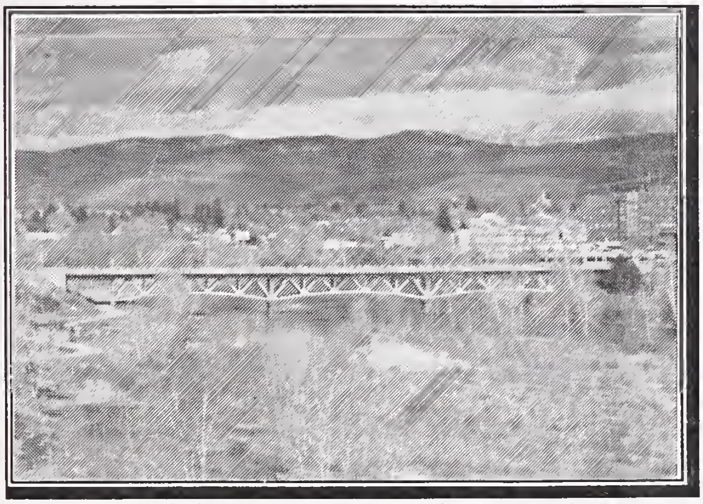
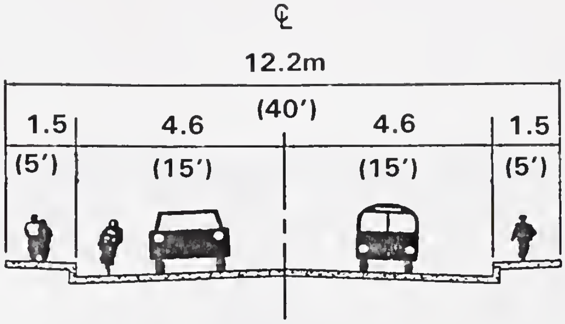
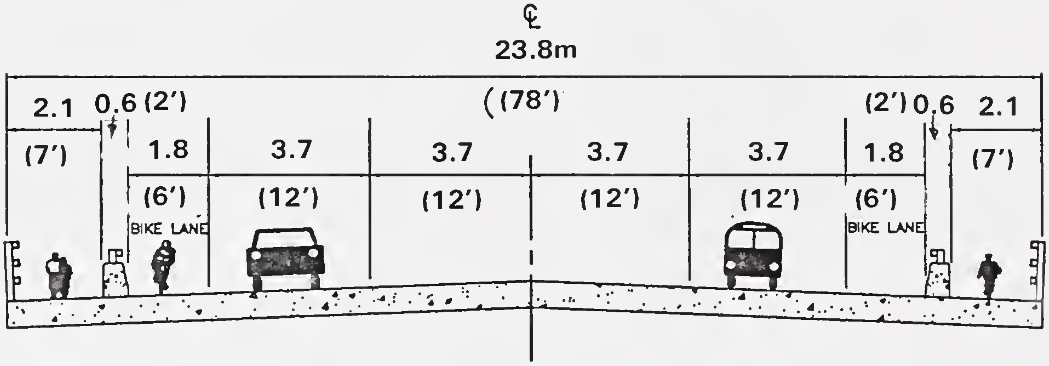


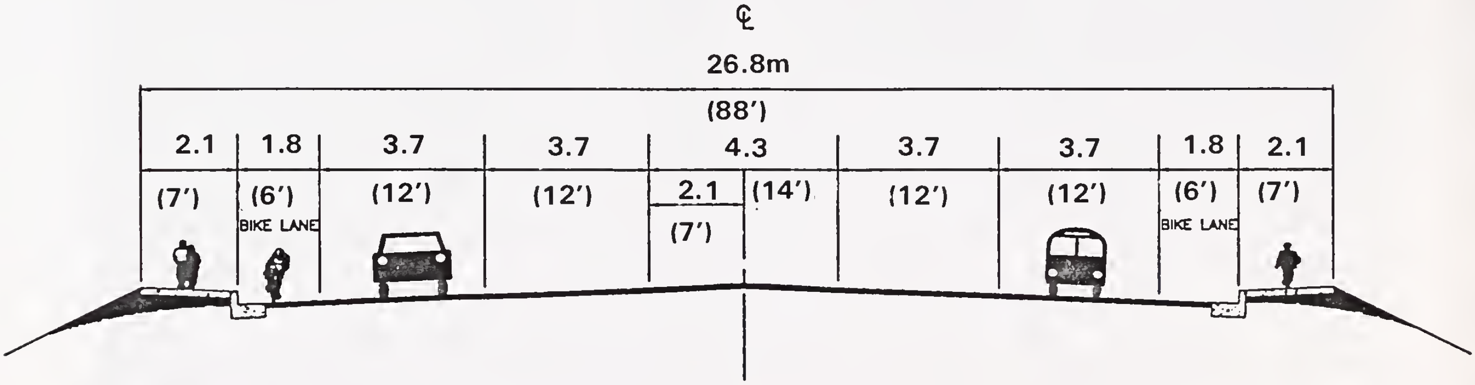
Figure 4. Existing Orange Street Bridge Deck truss was built in 1937.



EXISTING BRIDGE TYPICAL



PROPOSED ROAD BRIDGE TYPICAL



PROPOSED ROADWAY TYPICAL
(@ CREGG LANE)

FIGURE 3
TYPICAL SECTIONS

(NOTE: FIGURES ARE SHOWN IN METERS. NUMBERS IN PARENTHESIS ARE IN FEET) which is a narrow steel deck truss and the old Milwaukee Railroad Overpass which is a three span cast-in-place concrete structure that is no longer used by the railroad since the abandonment of the entire line as shown in ***Figure 5.*** The other section of remaining 2-lane roadway along this corridor is the narrow Montana Rail Link (MRL) railroad underpass (commonly called the Orange Street underpass) which is a combination of several structures for the rail yard lines and the warehouses and access roads next to the yard. This other section is farther north and is not part of this project.

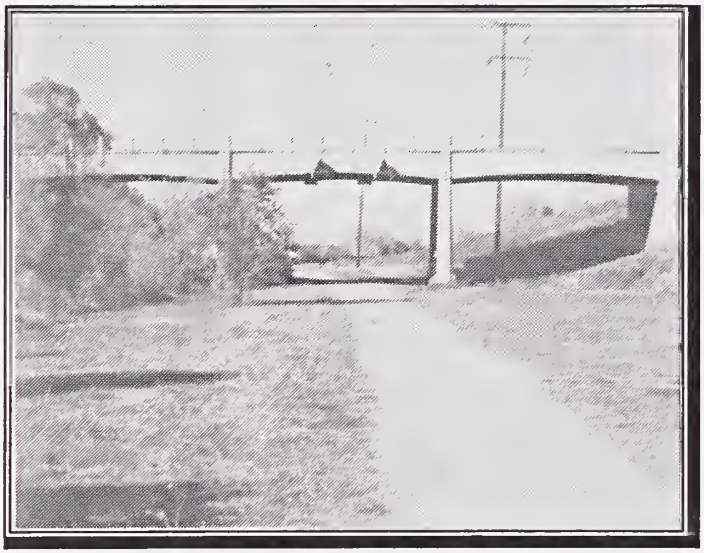


Figure 5. Old deteriorated Milwaukee Overpass with trail underneath. No longer needed for rail purposes.

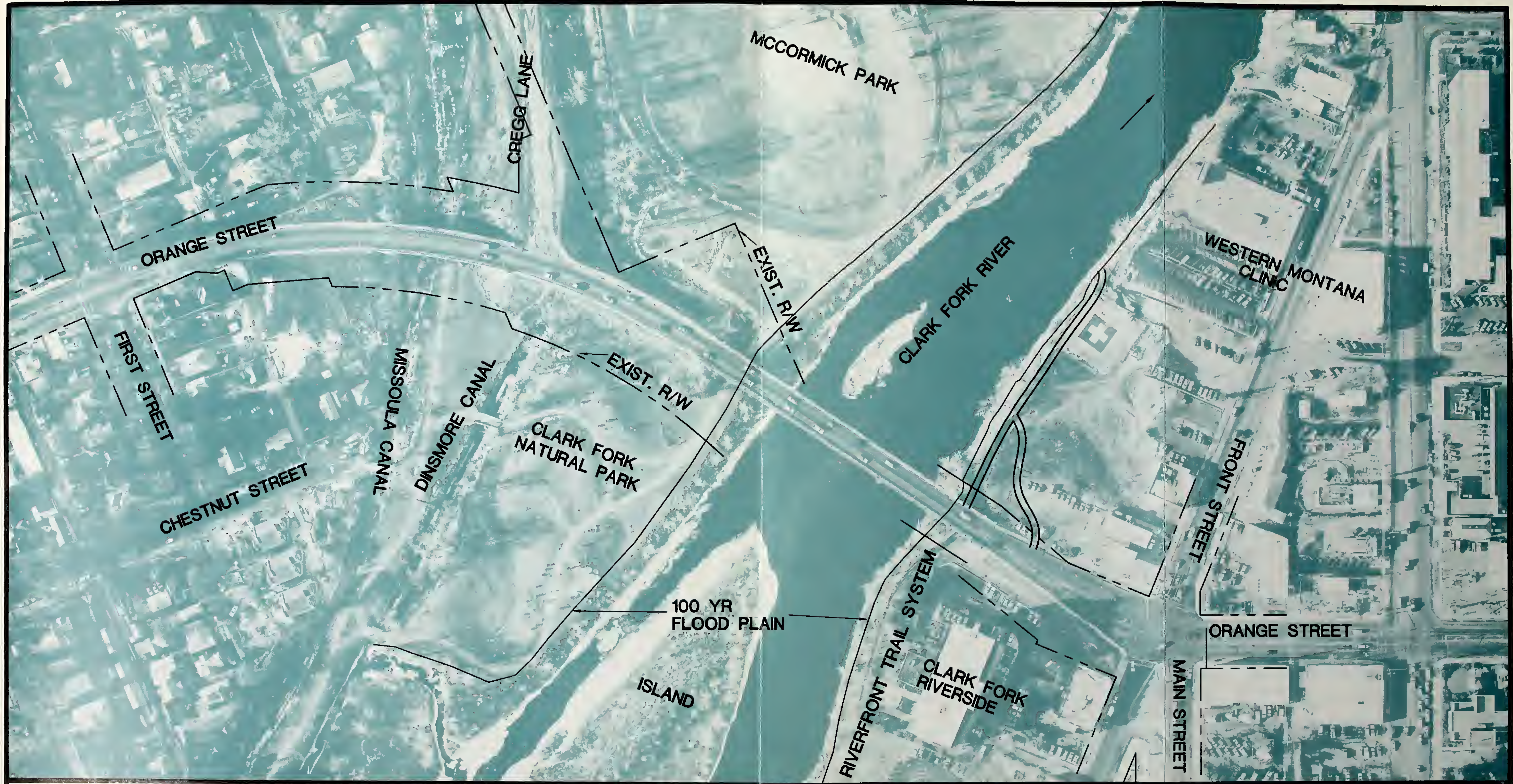
The corridor is primarily public ownership within the center portion of the project area and private ownership at each of the project ends. The west boundary of this roadway is the McCormick Park and on the east side the Clark Fork Natural Park borders the roadway. There are two irrigation canals, Missoula Canal and the Dinsmore Canal, that cross the corridor under the roadway and are the primary irrigation supply for the Missoula Valley. The Clark Fork River passes under the roadway along with the Riverfront Trails system which is located on each side of the river.

Within the project area, the land uses are primarily residential and city parks with a small amount of commercial property. The corridor is zoned for several different uses and are as listed below:

| | | |
|---|---|---|
| P-I | East of Orange Street | Clark Fork Natural Park area |
| P-II | West of Orange Street | McCormick Park area |
| R-II | South end of Corridor | Neighborhood area |
| C | Northwest corner of corridor | Commercial area |

The existing roadway is much higher than the surrounding terrain due primarily to the elevation of the old Milwaukee Railroad bridge which is no longer needed for rail purposes.

***Figure 6*** presents the existing rights-of-way, land uses, existing road configuration and alignments and current developments in the project area.



## ORANGE STREET BRIDGE AND RIVERFRONT ACCESS

STPU 8107(10)
MISSOULA, MONTANA

EXISTING CONDITIONS

FIGURE 6

# SECTION 2. PROJECT PURPOSE AND NEED

## 2.1 Existing Conditions

Orange Street is a principal arterial providing a direct route between the south side of the city (and the Bitterroot Valley via U.S. 93) and downtown and Interstate 90. The bridge over the Clark Fork River was built in 1937 and carries two lanes on a 9.14 meter (30 foot) wide roadway.

Several years ago, the City of Missoula upgraded the Orange/Stephens corridor to provide a 5-lane facility from Brooks Street on the south to Alder Street on the north.

The Missoula area has seen a considerable amount of rapid growth in the recent years. This growth pattern is anticipated to continue in a more sustained manner than the cyclic growth that has been seen in previous years. To accommodate this growth, there is a need to plan for the future. Hence, this project will provide a coordinated and well designed infrastructure system for this area that will meet the traffic needs for motorized vehicles, bicyclists, pedestrians, and others.

Existing traffic conditions have been obtained from traffic counts taken by the City of Missoula, Druyvestein Johnson & Anderson (DJ&A), and the Montana Department of Transportation (MDT). The growth in the traffic along this corridor has been counted at the Orange Street bridge permanent traffic counter and the figures below show the calculated Average Daily Traffic (ADT) for this corridor.

| YEAR | TRAFFIC VOLUME (ADT) | YEAR | TRAFFIC VOLUME (ADT) |
|---|---|---|---|
| 1971 | 13,700 | 1987 | 16,550 |
| 1981 | 15,800 | 1988 | 15,700 |
| 1982 | 15,8[illegible]0 | 198[illegible] | 15,7[illegible]0 |
| 1983 | 16,550 | 1990 | 16,750 |
| 1984 | 16,650 | 1991 | 18,350 |
| 1985 | 16,550 | 1992 | 19,350 |
| 1986 | 16,800 | 1993 | 20,000 |

As can be seen from the traffic flows on Orange Street, the traffic volumes are increasing rapidly and in a consistent manner. The intersections at 3rd Street and Front and Main Streets were classified as operating at a level-of-service E when the Bridge Needs Study was completed in 1990 based on the 1988 traffic volumes of 15,700 vehicles per day (VPD). It had been projected during that study that the year 2010 volumes would be 21,900 VPD. The current 1994 volumes have already nearly reached this mark and based on these comparative volumes, the roadway would now be operating at a level-of-service less than E. See Section 4.5 Traffic Impacts for more information on level-of-service and traffic volumes.

The existing and estimated future Average Daily Traffic Volumes (ADT) and the Design Hourly Volume (DHV) on Orange Street in the project vicinity are shown as follows:

**ORANGE STREET**

| | | | |
|---|---|---|---|
| 1993 ADT | = | 20,040 | (Present, Average Daily Traffic) |
| 1998 ADT | = | 21,600 | (Traffic at Opening Date) |
| 2015 ADT | = | 26,340 | (Design Year Traffic) |
| DHV | = | 2,650 | (Design Hourly Volume) |
| D | = | 55-45% | (Directional Distribution) |
| T | = | 10.5% | (Trucks, Medium and Heavy) |
| All Trucks | = | 13.5% | (All Trucks) |
| 18 kip EAL | = | 1600 | (Daily) (Equivalent Axles Loads) |

## 2.2 Community Services

There are several community services that will be greatly enhanced by the addition of this project. The current access to the McCormick Park is via Cregg Lane which is located between the Orange Street Bridge and the old Milwaukee Railroad overpass. The clear sight distance at this intersection is well below the current standards when entering onto Orange Street, primarily due to the presence of the high concrete parapet railing on the railroad overpass. A vehicle is forced to nose out beyond the appropriate stop bar to be able to see to the south. A left turn at this intersection is very dangerous under the current conditions. Access into the park is also very difficult as there is no left turn lane and the turning vehicle must stop traffic while waiting to make a left turn off of Orange onto Cregg Lane. The roadway is not sufficiently wide at this location to accomodate a left turn lane. Trucks over 3632 kg (8,000 lbs) are prohibited from using residential streets and therefore must use the difficult Cregg Lane access to enter the McCormick Park area, which compounds the problem.

The access problem becomes very apparent whenever there is a major sporting event at the park. Much of the traffic will exit through the local neighborhood due to the difficult access onto Orange Street. If the park facilities are enlarged or enhanced, the access problem will become an even bigger issue. This project would improve both the access to and from the McCormick Park complex and would help keep the traffic at the main entrance rather than forcing it through the local neighborhoods. A signal warrant analysis will be completed during design to determine if this intersection should be signalized.

The Clark Fork Natural Park is on the east side of the roadway opposite from the McCormick Park. The park terrain is designed for recreational walking, biking, sitting or otherwise enjoying the park setting. There are no recreational facilities at this park. This park is one of the primary access points to the Riverfront Trail system. There is currently no parking area available for this park and so people use a very small cul-de-sac at the end of Chestnut Street that is barely adequate for residential parking. This situation is not adequate for the needs of this park and the neighborhood. By providing more and better access from the roadway to the park system people will be able to enter the parks and trails more readily from other locations. This will relieve some of the burden placed on the Chestnut Street residential area.

The Orange Street corridor is one of the primary access routes to the Missoula Central Business District. As traffic continues to increase with the growth of Missoula, the bottleneck at the Orange Street Bridge will become an increasing deterrent from using this route and will force the traffic through local side streets to the next river crossing, i.e. Higgins Avenue to the East and Russell Street to the West. The Russell Street Bridge was recently closed to traffic for a week and the impacts were very noticable. The traffic on Orange Street during this period would be a good example of future traffic demands on this corridor. The traffic was stopped from Front Street all the way back to 6th Street. At this point, people began looking for alternate access routes to the downtown area, with Higgins being the closest location. The additional lanes on Orange Street from 6th Street to 1st Street were still essentially unused during this peak use time due to the transition to 2-lane at the Orange Street Bridge. The other corridors will also become congested and this in turn will discourage people from going to the downtown businesses.

Due to the bottleneck at the Orange Street Bridge, the current 5-lane roadway along Orange Street between 6th Street and 1st Street is used primarily as a 2-lane roadway which causes delays in traffic, particularly during the peak traffic hours. ***Figure 7*** shows a photo taken during a mid-day peak traffic rush. It has been observed that a very small portion of the traffic utilizes the additional lane as they are aware of the lane transition before the bridge and therefore drive the roadway as a 2-lane highway rather than a 4-lane. The transition at the end of the 4-lane is very short and abrupt and does not allow traffic adequate time to transition to the 2-lane at normal operating speeds. They

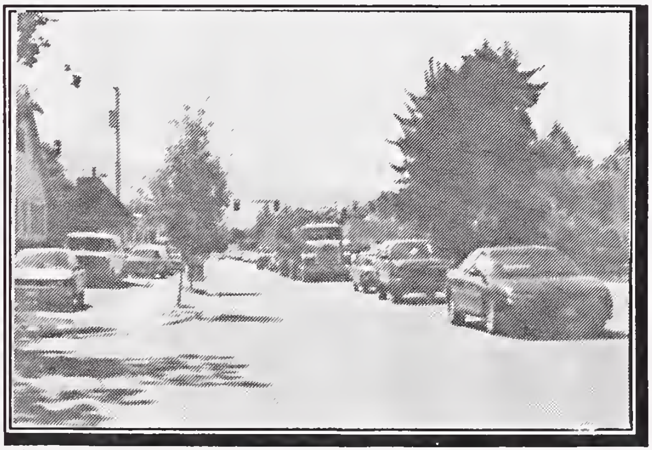


Figure 7. Orange Street / 3rd Street south of the bridge used as 2-lane rather than 4-lane roadway.

therefore, either drive in only the one lane and wait their turn or press ahead and try to force themselves into the waiting line of vehicles. A similar situation occurs at the other end of this botteneck as the traffic enters the bridge from the north. The 4-lane section of Orange Street between Broadway and Main is also used primarily as a 2-lane highway due to this transition. The result is that the majority of the traffic utilizing this 5-lane roadway in this section of the corridor, only gains the benefit from half of the roadway. This reduces traffic speed and causes many more stops and starts than would be necessary if the 5-lane roadway continued all the way through this section.

The emergency response people and vehicles are also hindered with the traffic patterns discussed above. The proposed improvements will aid in mitigating these congestion problems both now and in the future.

Improving access to the riverfront parks and trails system is an important part of this project for pedestrians, bicyclists, children, the elderly, families and those with disabilities. The riverfront parks and trails offer a great variety of recreational activities and greater accessibility to this sytem and across the Clark Fork River will enchance community services.

## 2.3 Air Quality

One of the primary purposes of and needs for this project is improvement of air quality. Missoula has been designated non-attainment for carbon monoxide (CO) and respirable particulate (PM-10) by the Environmental Protection Agency. The CO levels in the Missoula Valley are largely due to the volume of traffic and particularly the congestion of the traffic in concentrated areas where they cannot move freely without considerable stopping and idling modes. The PM-10 levels are mostly attibuted to residential wood burning, re-entrained road dust, motor vehicle emissions and other point sources.

The City of Missoula has just recently restricted the use of wood burning stoves and has purchased several new generation street sweepers. They have also been using oxygenated fuels in the winter time to reduce CO emissions and are using liquid de-icing agents rather than the standard sanding methods during icy conditions. With less sand being applied to the streets and more efficient street cleaners, the potential for causing an increase in re-entrained road dust has diminished. The next portion of the equation is to try to increase the efficiency of the vehicular traffic and reduce the amount of unnecessary idling and stopping times.

The Orange Street Corridor contributes to the air quality problem by creating a bottleneck. The traffic pattern in the corridor on either side of the Orange Street Bridge has a five lane configuration which abruptly necks down to a narrow 2-lane roadway. This constriction creates traffic congestion, slower travel times, more idling modes and stop/start conditions, and safety concerns.

This constricting traffic pattern hinders the attempts to improve air quality, as the traffic is not allowed to move in a smooth and methodic manner, but rather is forced to stop and idle at much longer intervals. With the removal of the Orange Street bottleneck, the traffic will flow much smoother and have fewer stops and idling modes, thus improving the air quality and the safety concerns. Air quality impacts and projected improvements are analyzed in more detail in Section 4.8.

## 2.4 Existing Bridge Condition

The existing bridge was built in 1937 and was known as the Parkway Bridge. The old Milwaukee Railroad bridge was built at the same time. These bridges have provided over 57 years of service to the Missoula community with very little maintenance having been completed. These bridges were inspected in detail in 1989 during the Missoula Bridge Needs Study and the Orange Street Bridge was inspected again in 1994 in conjunction with the Montana Department of Transportation. Some sample photos from the bridge inspections are shown in ***Figures 8 and 9*** on the following pages. It was recommended in 1989 that the Milwaukee Railroad overpass be removed as it was no longer necessary for a railroad crossing.

The roadway elevation at this section of the corridor was designed to pass over the railroad tracks with the necessary clearances. The roadway is therefore approximately 3-3.6 meters (10-12 feet) higher than is necessary with the railroad requirements no longer an issue. The original design for the Orange Street Bridge was for a H-15 loading which is considerably lower than the current HS-20 loading that is now required on highway bridges.

The Orange Street Bridge is in fairly good condition but is in need of some major repairs. The deck is badly deteriorated in places and the sidewalk is so much higher than the traffic that it is a hazard to the bicycles that travel alongside it. There are advanced rust and corrosion problems with several of the steel members. The main steel truss members are corroding at the bearings and will require considerable effort to clean and strengthen them. The abutments and piers also have areas of concrete deterioration.

There has been an active wood mill next to this bridge site for its entire life. Many of the logs that were brought to the mill were transported over the Orange Street Bridge. Due to the repeated loading of the bridge by these heavy loads, the bridge may be approaching its fatigue life for the steel members. Considerable effort and cost would be required to strengthen the bridge to the current standards in order to obtain an economical life span. It may have a remaining functional life of approximately 10-15 years with the needed modifications while a new structure would have a life span of 50 years or more.

## 2.5 Need for Action

The need for action and the purpose of this project is summarized in the following items that will be accomplished when this project is completed:

1. *Improve air quality* by providing a uniform access along the Orange Street corridor so that traffic can flow freely from one end to the other with a minimal amount of delay and stopping times.

2. *Improve the vehicular safety* of the area by eliminating the roadway bottleneck and the need to transition from a 4-lane to a 2-lane roadway in a short and abrupt manner at both ends of the bridge, and also improving the Cregg lane intersection.

3. *Improve the pedestrian and bicycle safety* along the Orange Street roadway by providing adequate bicycle lanes across the bridge and lowering the sidewalks to match the road grade. This will eliminate the possibility of bicycles colliding with the curb and throwing them into the traffic lane. ( A fatality has already occurred in this manner on the bridge.) A physical barrier between the vehicles and the pedestrians also needs to be provided.

4. *Provide more direct and safer access to the City of Missoula Parks* i.e. McCormick and Clark Fork Natural Parks for all modes of transportation as well as better pedestrian and bicycle access to the Riverfront Trail system .

5. *Provide a continuation of the Riverfront Trail system* and allow for direct access to either side of the river trail at the trail level.

6. *Provide better and more desirable access to the Central Business District* which will encourage people to use the main traffic corridors rather than the side streets through the local residential neighborhoods.

7. *Decrease the overall emergency response time* for fire and rescue personnel and vehicles as well as improve the safety during a response for both the roadway and trail systems.

8. *Repair or replace the existing deteriorated bridge* so that it will carry the current and future traffic loads in a more safe and efficient manner for many years to come.

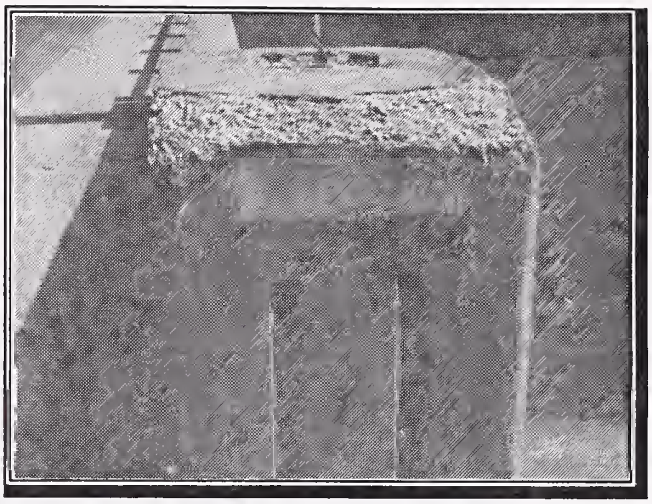


PHOTO 1. SECTION OF BRIDGE RAILING SHOWING EXTENSIVE CONCRETE DETERIORATION.

PHOTO 2. BRIDGE TRUSS CONNECTIONS HAVE ADVANCED CORROSION INTERNALLY AND AT CONNECTIONS.

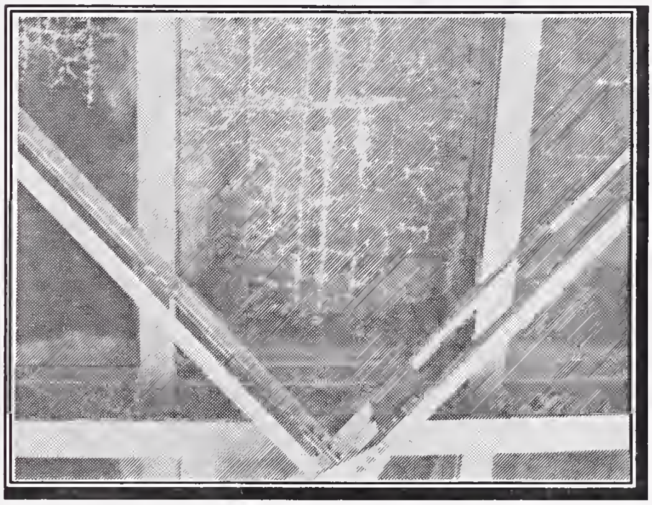


PHOTO 3. BRIDGE DECK IS DECAYED IN MANY AREAS AND HAS REBAR CORROSION IN PLACES - SHOULD BE REPAIRED.

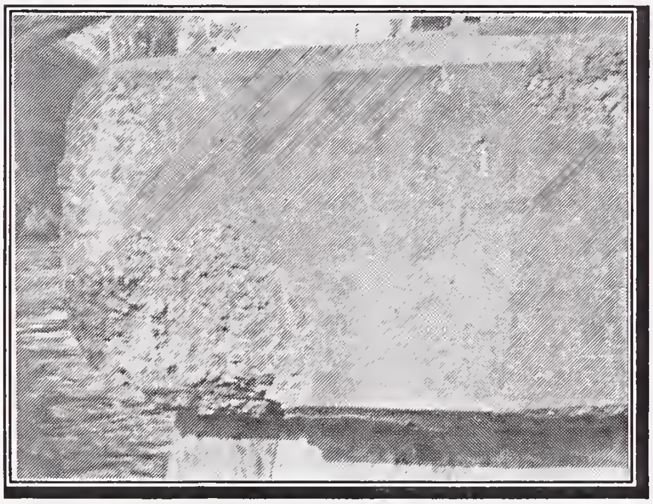


PHOTO 4. PIERS ARE CRACKED AND CONCRETE IS SPALLING IN PLACES AS SHOWN HERE.

*FIGURE 8. EXISTING ORANGE STREET BRIDGE INSPECTION PHOTOS (1994).*

PHOTO 2. CONCRETE SPALLING ALONG EDGE OF DECK AND BASE OF RAIL POST. NOTE EXPOSED REBAR..

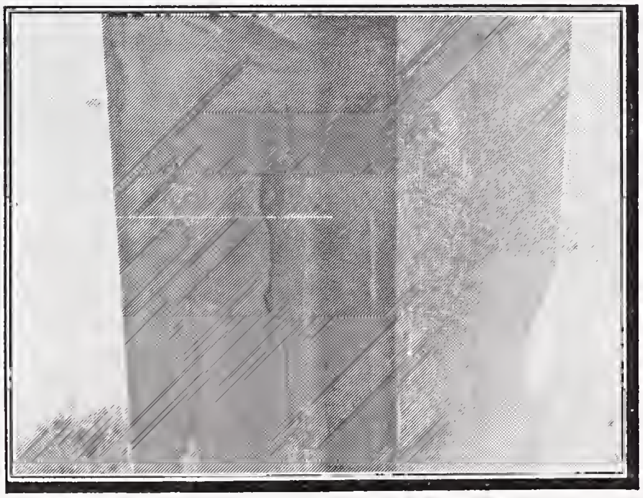


PHOTO 4. EXPOSED REBAR CAGE IN SUPPORT COLUMN - REBAR CORRODED.

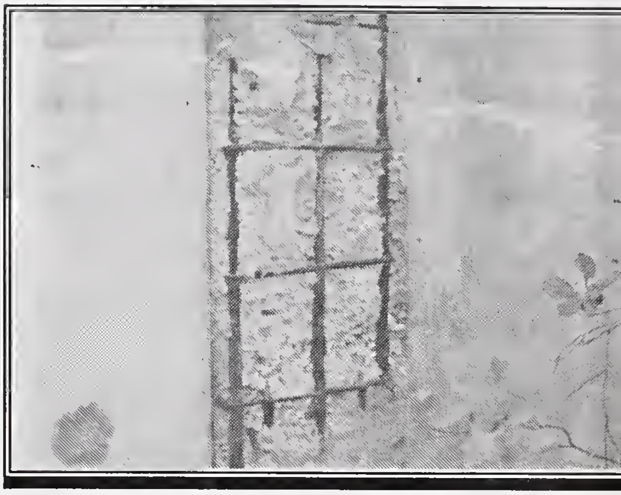


PHOTO 1. CONCRETE ON BRIDGE COLUMN IS CRACKED AND SPALLING. REBAR IS EXPOSED IN SEVERAL PLACES.

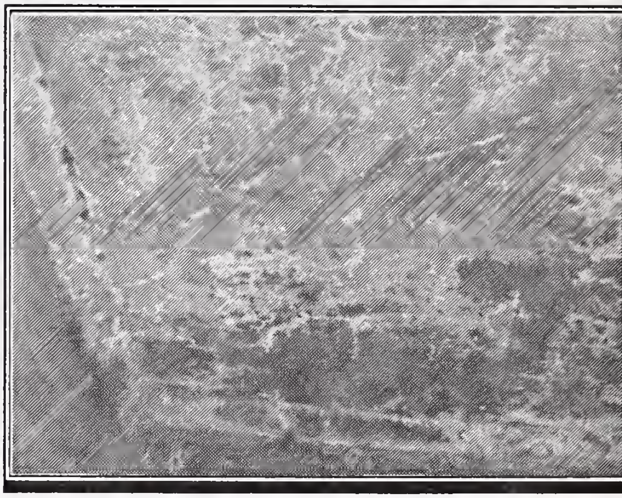


PHOTO 3. DECK IS CRACKED AND STAINING FROM CORRODED REBAR IS EVIDENT - REPLACE DECK.

*FIGURE 9. EXISTING MILWAUKEE RAILROAD BRIDGE INSPECTION PHOTOS (1989).*

# SECTION 3. PROPOSED ALTERNATIVES

## 3.1 Development of Alternatives

The proposed action involves the construction of improvements to a narrow 548 meter (1800 foot) long section of the Orange/Stephens traffic corridor. It includes widening this section of the corridor to match the existing roadway on either side of the bridge crossing and the addition of bicycle lanes and sidewalks on both sides of the roadway. Considering the environmental limitations and the desire to provide the safest possible roadway, several alternative design methods were identified. The alternative alignments and design methods were considered with respect to their overall effectiveness in fulfilling the needs of the corridor and this immediate section of roadway, while providing the necessary improvements in the most cost effective and environmentally safe manner. The following primary issues were considered in the selection of the proposed alternative:

- Reducing vehicular emissions by relieving congestion and idling/stop/start modes.
- Encouraging non-motorized modes of transportation and reducing the total Vehicle Miles Travelled (VMT).
- Minimizing the impacts to the environment and surrounding system.
- Improving safety for pedestrians, bicyclists, and vehicular traffic along the corridor.
- Providing most economical and direct access to the adjacent parks and trail system.
- Developing the most functional design for access to the Central Business District and least use of the local neighborhood streets.
- Encouraging people to utilize the pathways and trail system in this part of the community.
- Minimizing the impacts to existing community and commercial facilities.
- Creating the least interference with the existing traffic patterns.
- Minimizing the relocation of utilities and distribution lines.

## 3.2 Alignments Considered

The "Bridge Needs Study" was conducted in 1989 and completed in 1990 to "define the existing and future needs of the bridges in the Missoula area" and to assist in the planning for needed improvements. During that study, recommendations were made for improvements to the Orange Street River Bridge and a preferred alternative noted. This assessment, utilizes the data and information of that study and supplements it with additional data and recommendations. The recommendations for the Orange Street Bridge and the Milwaukee Overpass Bridge were as follows:

Orange Street Bridge (1989 recommendation - Bridge Needs Study)

1. The preferred alternative was to remove the existing structure and replace it with a new steel girder bridge at a lower grade. This was considered to be more cost effective.

Milwaukee Overpass Bridge (1989 recommendation - Bridge Needs Study)

1. Remove the existing bridge and fill the area in to match the existing roadway. Place the irrigation ditch in a culvert.

The original study is available for review at the City of Missoula offices and a copy of the section for the Orange Street River bridge and Milwaukee Railroad Overpass is included in Appendix 1.

City of Missoula considered several construction alternatives as well as the "no-build" alternative for this project. Federal environmental regulations require that the "no-build" alternative be evaluated for a project of this nature. Many different options and variations of each alternative were considered during this project. The three final alternatives used in this analysis for both the roadway and pedestrian/bicycle bridge were selected based on the findings of the public involvement process and the additional engineering analysis that was subsequently completed.

**Road Bridge Alternatives:**

**R1.** **Refurbish and widen existing bridge** - same grade - complementary additional structure (steel girder) - remove railroad underpass - lower grade slightly - realign Cregg Lane. Bike lanes and Sidewalks (New trail underpass)

**R2.** **Remove and Replace** existing bridge with new **3 span** structure - lower grade - remove railroad underpass - relocate Cregg Lane. Bike Lanes and Sidewalks (New trail underpass)

**R3.** **Remove and Replace** existing bridge with new **2 span** structure - lower grade - remove railroad underpass - relocate Cregg Lane. Bike Lanes and Sidewalks (New trail underpass)

**RNB.** **"No-Build" Alternative".** The "No-Build" alternative implies no activities beyond the continued routine maintenance of the existing facilities.

The option of replacing the Milwaukee Railroad Overpass with a new trail underpass was evaluated and considered as a portion of each of the three river bridge alternatives. Public opinion and the disadvantages of building a pedestrian facility under a 5-lane roadway that would be inviting and safe for the public led to the elimination of this portion of the alternative. This is described in more detail in a later section.

The "No-Build" alternative is not feasible and prudent because it would not correct existing and projected air quality and safety deficiencies. The presence of the existing bottleneck on this corridor creates congestion and thereby reduces the air quality in this section of the roadway. It also encourages vehicular traffic to use the neighborhood streets during periods of peak traffic and presents a safety concern and nuisance to the residents in the area. Not providing such correction would constitute a significant impact on the local community and route users. It would also result in a decrease in the air quality along this major corridor in a community that is currently classified as non-attainment for air quality. Although the "No-Build" alternative would not satisfy the objectives of the proposed action, it is addressed in this Environmental Assessment as it will serve as the basis for evaluation of the impacts of other alternatives.

**Trail Pedestrian/Bicycle Bridge:**

**PB1.** Attached bridge underneath (alongside) road bridge.

**PB2.** Separate bridge upstream of road bridge - below island.

**PB3.** Separate bridge downstream of road bridge - end of trail on north side.

**PBNB.** **"No-Build" Alternative** The "No-Build" alternative for the pedestrian/bicycle bridge would indicate no additional structure across the river whether separated from or attached to the Orange Street bridge. The users would be confined to using the road bridge for pedestrian and bicycle access across the river.

The alternatives for the Pedestrian/Bicycle bridge were considered with respect to how an additional structure (attached or separate) would encourage non-motorized transportation and thereby improve the air quality in the area. An increase in pedestrian and bicycle usage would decrease the total Vehicle Miles Travelled (VMT) and would therefore result in a corresponding decrease in vehicular emissions. The additional usage of non-motorized modes of transportation is a prime element in the Federal Highway bill known as the Intermodal Surface Transportation Efficiency Act (ISTEA) that is currently the regulator of projects similar to this and which also provides sources of funding for these facilities. Although the "No-Build" alternative would not encourage the increase of pedestrian/bicycle activity in the community it is addressed in this Environmental Assessment as it will serve as the basis for evaluation of the impacts of other alternatives. See Section 4.8.2 for additional information on VMT reduction.

***Figures 10, 11, 12 and 13*** show computerized artistic sketches of potential structures used during the Environmental Assessment of the three final alternative alignments considered for the roadway along with the "No-Build". ***Figure 14*** shows artistic sketches of the potential structures that could be used for the three final alternative alignments considered for the pedestrian bridge during the selection process.

## 3.3 Comparative Cost Estimates

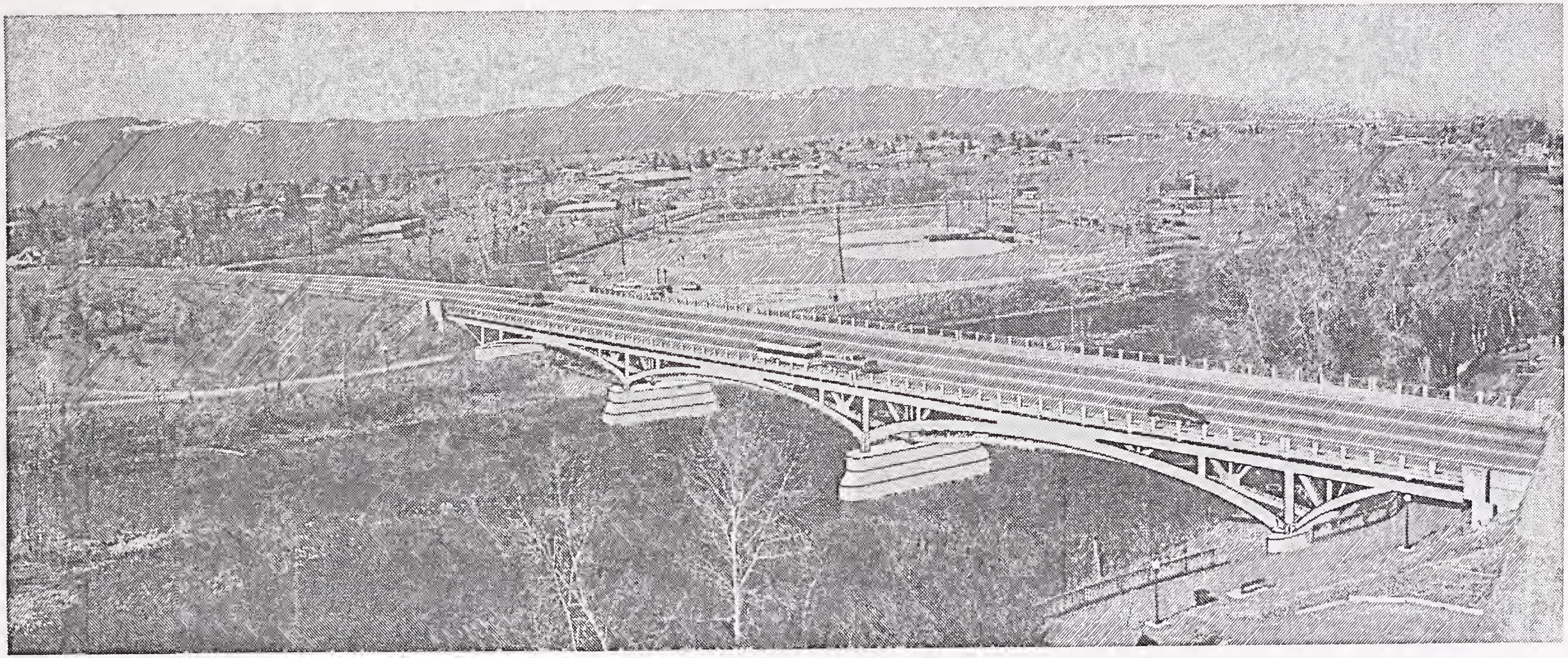
Cost estimates were prepared to aid in the selection of the preferred alternative as well as to define those options that may be beyond the capacity of this project. The intent of the estimates was to evaluate and compare the major cost differences between alternatives. Items included were those major cost items which vary significantly among the alternatives.

Earthwork estimates were based on topographic mapping, preliminary alignments and profiles (prepared at 1" = 50' scale) and the roadway widths as previously specified. Embankment slopes were assumed to be three horizontal to one vertical. Cross sections were prepared at 15.2 meter (50 foot) intervals for the roadway and earthwork volumes were calculated by the average end area method. It is to be anticipated that volumes for any of these alternatives will be revised as design of the selected alternative is refined.

The existing roadway and bridge were considered to remain in place during construction to alleviate major traffic problems and the need for costly detours and disruptions of local businesses and neighborhoods.

Surfacing quantities were estimated by using a typical section similar to the improved roadway sections on either side of this project. Unit costs for construction work and materials were estimated from the MDT bid tabulations for the period January through December, 1993. Actual costs may vary due to the suitability of excavated material for use in embankment construction, earthwork balance, haul distance for borrow, types of materials used for roadway surfacing and special design considerations.

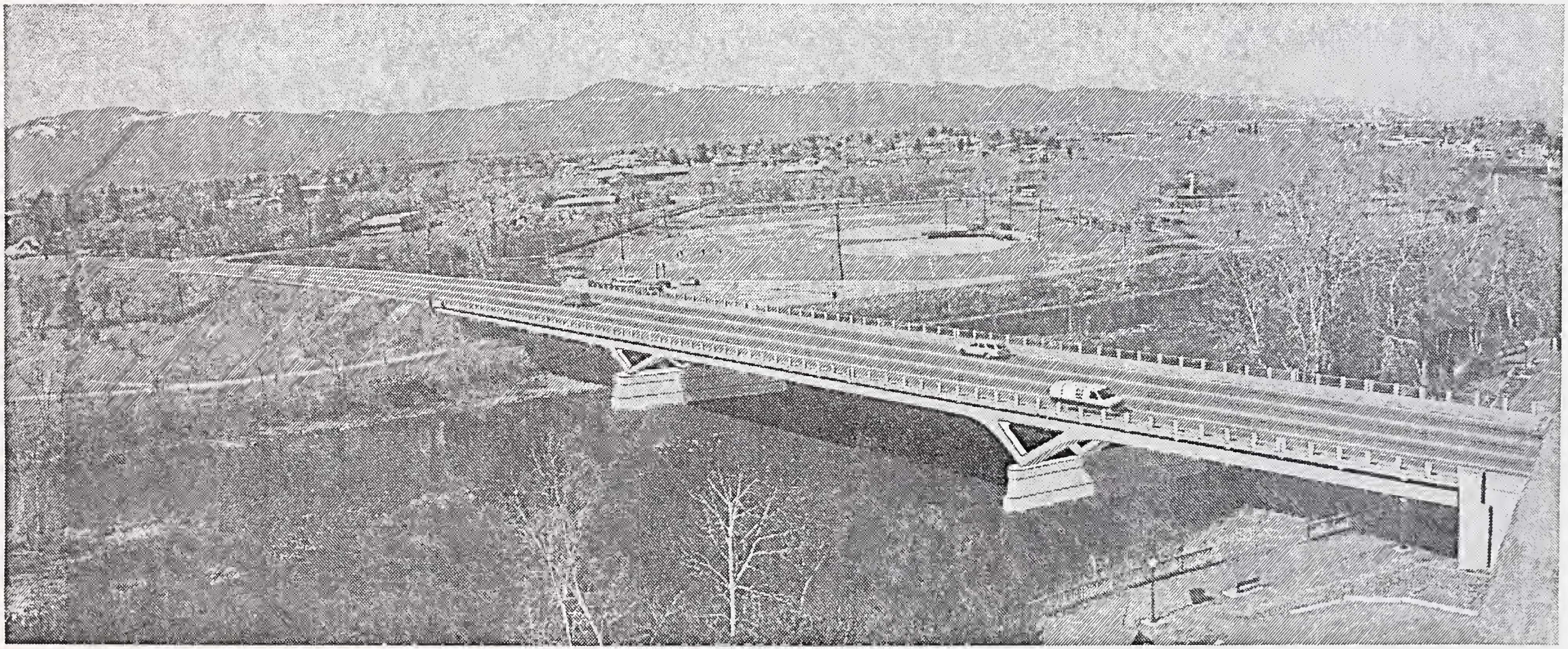
Due to the existing condition of the structures on this project, costs have been included in the No-build option for maintenance and rehabilitation so that they can continue to function for their intended purpose. This will be needed to keep them in safe operating condition.



REFURBISH AND WIDEN
EXISTING BRIDGE

**ALTERNATIVE R 1**

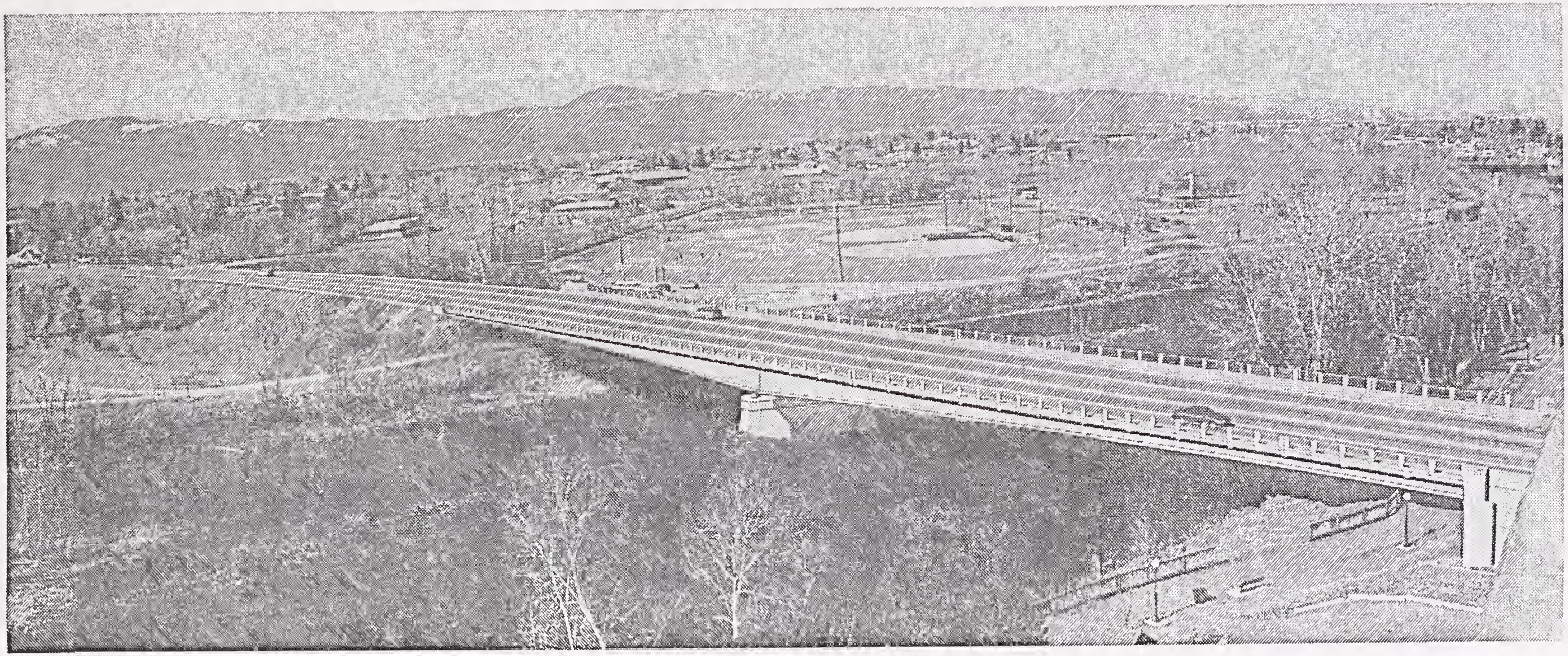
**FIGURE 10**



REMOVE AND REPLACE
WITH
**NEW 3 SPAN**

**ALTERNATIVE R 2**

FIGURE 11

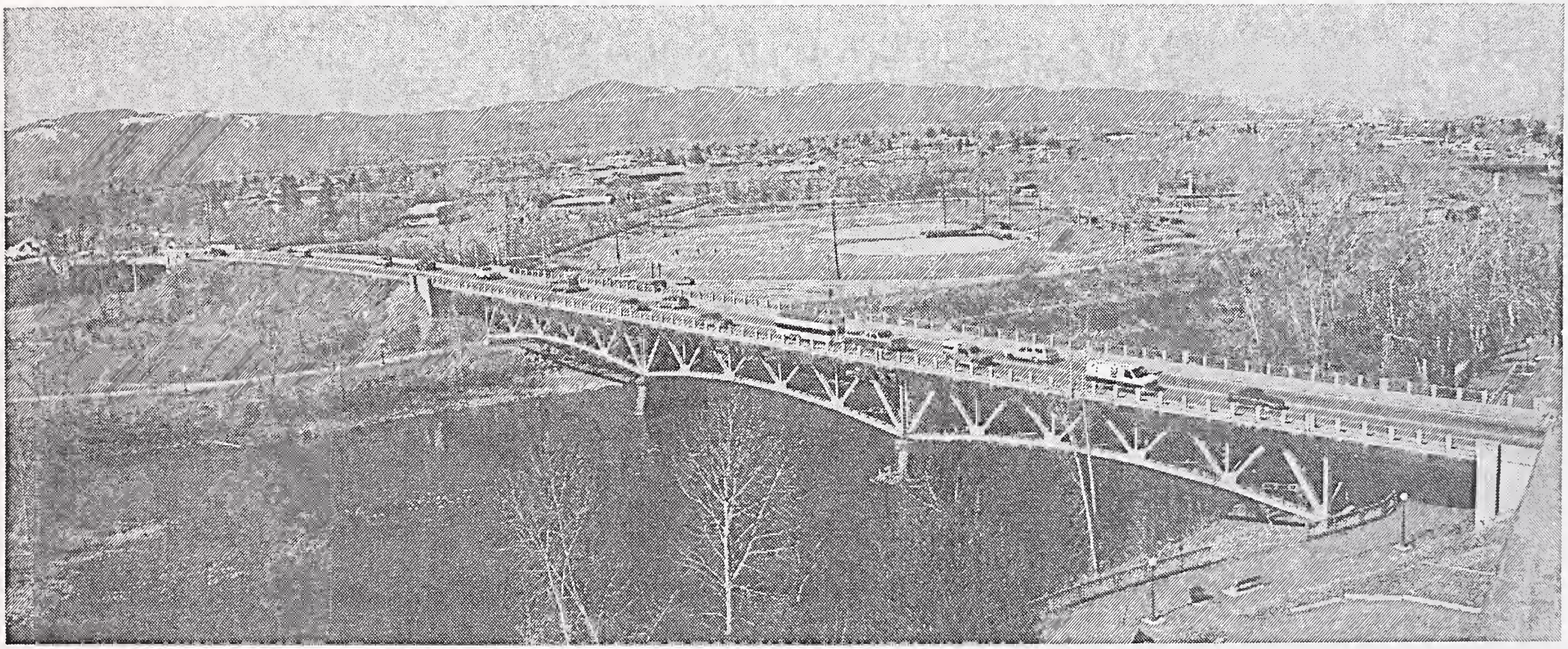


REMOVE AND REPLACE
WITH
**NEW 2 SPAN**

**ALTERNATIVE R 3**

(PREFERRED ALTERNATIVE)

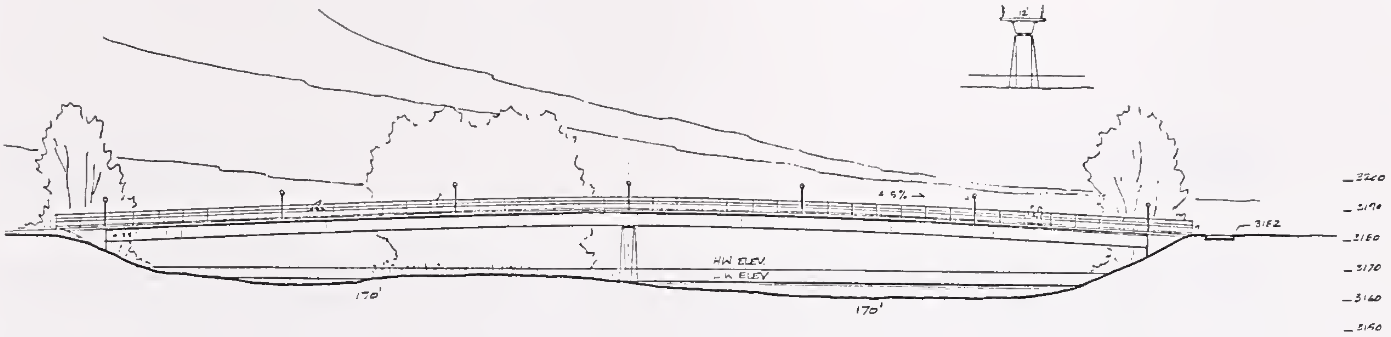
**FIGURE 12**



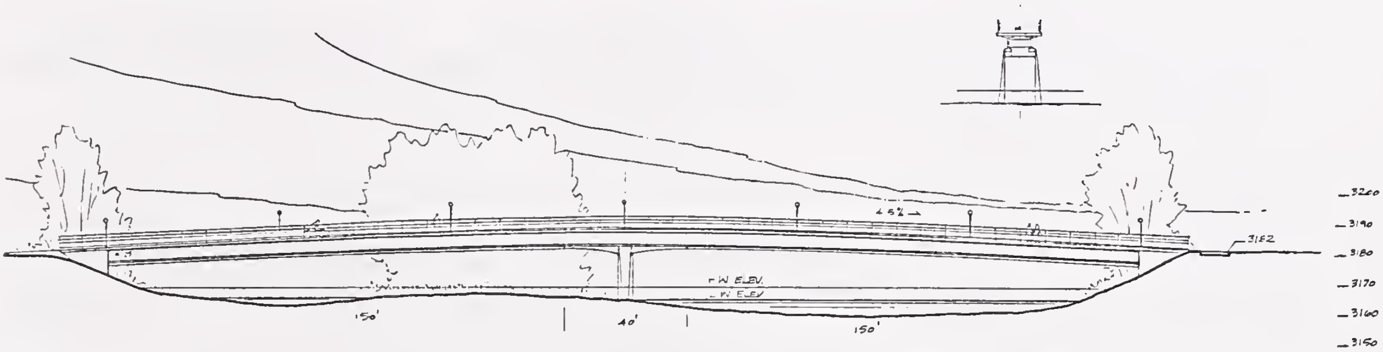
NO BUILD

## ALTERNATIVE RNB

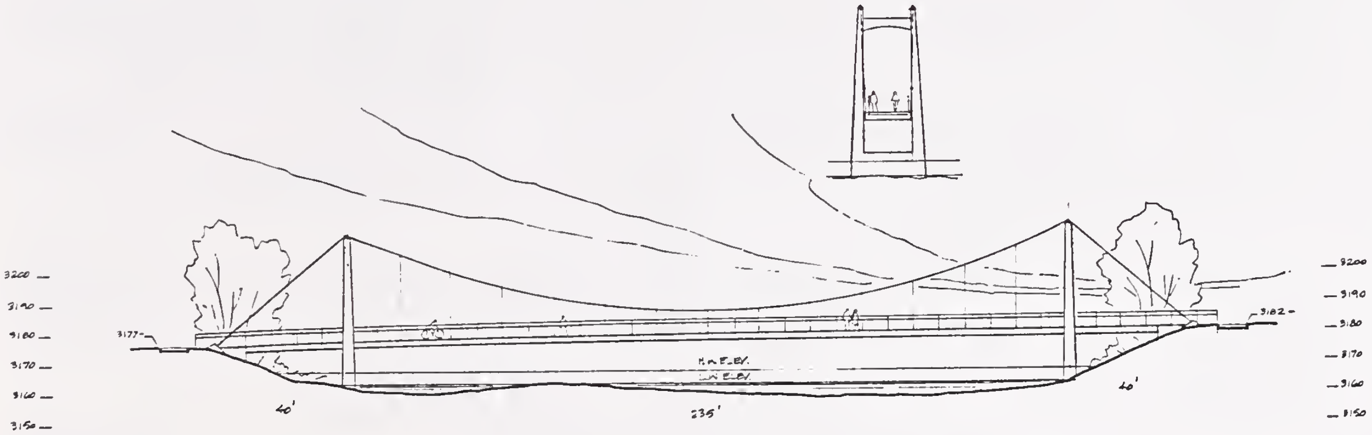
FIGURE 13



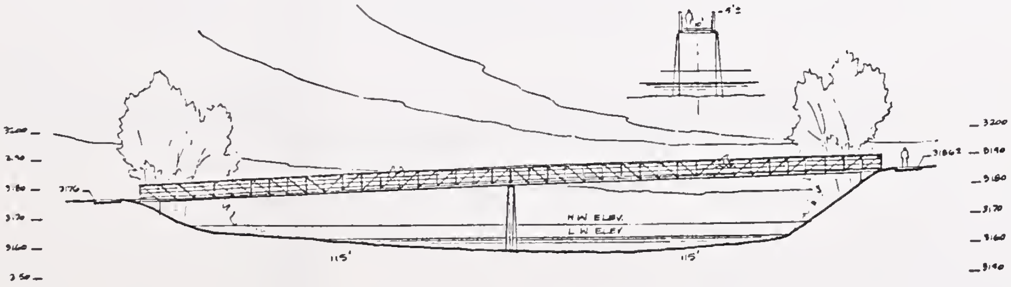
STEEL BOX GIRDER



CONCRETE BULB-TEE



SUSPENSION BRIDGE



STEEL PRATT TRUSS

## TRAIL BRIDGES

FIGURE 14

Structure costs for roadway bridges are estimated on square foot values based on estimated overall length, number of spans and structure depth. A variety of girder configurations were examined and different types were selected in the alternatives analyzed. All alternatives include sidewalks and bicycle lanes on the roadway template. The estimated cost ranges for the bridge alone for the various types are as follows:

***Road Bridges:***

**Refurbish and widen existing bridge: (R1)** (Estimates are based on keeping and refurbishing the existing two-lane bridge and building an additional two lane bridge next to it.)

| | | |
|---|---|---|
| **Refurbish Existing Bridge** | | $1,425,000 |

**Concrete** (New 2-lane and includes refurbish of existing bridge)

| | | |
|---|---|---|
| Haunched Concrete Slab | (5-Span) | $3,890,000 |

**Steel** (New 2-lane and includes refurbish of existing bridge)

| | | |
|---|---|---|
| Steel Deck Arch | (5-Span) | $4,270,000 |
| *Steel Rigid Frame* | *(5-Span)* | *$3,890,000* |

**Remove and Replace existing bridge: (R2 and R3)** (Estimates are based on building two lanes of the new bridge, removing the existing bridge and completing the final two lanes.) (Includes demolition of existing bridge)

| | | |
|---|---|---|
| **Existing Bridge Demolition** | | $320,000 |

**Concrete**

| | | |
|---|---|---|
| *Haunched Concrete Box* | *(3-Span)* | *$4,600,000* |
| Concrete Bulb-Tee | (3-Span) | $4,880,000 |
| Haunched Concrete Slab | (3-Span) | $4,880,000 |

**Steel**

| | | |
|---|---|---|
| *Steel Haunched Girder* | *(2-Span)* | *$4,500,000* |
| Steel Haunched Girder | (3-Span) | $4,690,000 |
| Steel Rigid Frame | (3-Span) | $4,690,000 |
| Steel Deck Arch | (3-Span) | $5,640,000 |

The alternatives shown in italics are the preferred options for a particular structure type at that location. Alternative designs may be desirable due to the close estimates shown.

***Trail Pedestrian/Bicycle Bridge:***
(Cost estimates are based on 3.65 meter (12 foot) wide bridge)

**Attached to Road Bridge - Location "A".** (98 meter)(320± Feet)

| | |
|---|---|
| *Beneath on Upstream side* | *$390,000* |

**Separate bridge.**

**Upstream - Location "B"** (below western toe of island from Clark Fork Natural Park to Clark Fork Riverside Retirement Center) (110 meter) (360± Feet)

| | | |
|---|---|---|
| Steel Cable-Stayed | (2-Span) | $650,000 |
| Steel Warren Truss | (2-Span) | $625,000 |
| *Steel Box Girder* | *(2-Span)* | *$560,000* |
| *Concrete Bulb-Tee* | *(2-Span)* | *$560,000* |

**Downstream - Location "C"** (from McCormick Park to end of Riverfront Trail on the north bank) (85 meter)(280± Feet)

| | | |
|---|---|---|
| Steel Cable-Stayed | (2-Span) | $500,000 |
| Steel Suspension | (3-Span) | $670,000 |
| Steel Warren Truss | (2-Span) | $490,000 |
| *Steel Box Girder* | *(2-Span)* | *$440,000* |
| *Concrete Bulb-Tee* | *(2-Span)* | *$440,000* |

**Downstream - Location "D"** (from McCormick Park to Western Montana Clinic) (70 meter)(230± Feet)

| | | |
|---|---|---|
| Steel Pratt Truss | (2-Span) | $400,000 |
| *Steel Warren Truss* | *(Single-Span)* | *$400,000* |
| *Steel Box Girder* | *(Single-Span)* | *$360,000* |
| Steel Cable-Stayed | (2-Span) | $420,000 |

*Table 1* shows a comparative summary of the cost estimates developed for each of the main roadway alternatives analyzed. The costs for the trail bridges are not summarized as they all involve approximately the same amount of approach work and allowances for this work have been included in the estimates.

***Table 1.*** ***COMPARATIVE COST SUMMARY*** - Roadway Structures

| ALTERNATIVE | | EARTHWORK | SURFACING | RAILROAD DEMOLITION | STRUCTURES | TOTAL |
|---|---|---|---|---|---|---|
| R1 | REFURBISH and WIDEN EXISTING | $325,000 | $350,000 | $225,000 | $4,120,000 | **$5,020,000** |
| R2 | REMOVE and REPLACE - 3 SPAN | $300,000 | $350,000 | $225,000 | $4,600,000 | $5,475,000 |
| R3 | REMOVE and REPLACE - 2 SPAN | $325,000 | $350,000 | $225,000 | $4,500,000 | **$5,375,000** |
| NB | NO-BUILD | $0 | ■$110,000 | ■$180,000* | ■$1,420,000* | ■$1,710,000 |

* Refurbish and modify existing bridge

■NOTE: The intent of these estimates is to evaluate and compare the major cost differences between alternatives. Estimates are based on the major cost items with contingency factors used for the miscellaneous work for each structure. The miscellaneous items at each bridge may vary but the overall costs should remain rather similar. Due to the condition of the existing bridge and roadway, the No-build option will require immediate maintenance and rehabilitation and estimated costs are included in the chart above.

## 3.4 Alternative Selection

The alternative selection process involved evaluating each of the alternatives in several different important areas. To more clearly evaluate these areas and in an attempt to be as unbiased as possible during the evaluation process, a matrix chart was prepared utilizing public comment and the Stakeholder Concept Teams.

The following matrix charts, shown in ***Tables 2 and 3***, are comparisons of the three alternatives for both the roadway and trails bridges that were selected for further consideration. The "No-build" alternative is also included in each matrix and used as a basis in the comparison.

The chart consists of the main items of concern that are discussed in more detail in the following sections of this report. A weight of importance was assigned to each item from 0-5 in relation to its overall importance to the project. The range included 0 for least importance and 5 for maximum importance. Items that seemed to have the same impacts for all three options were not included in the chart. The weight was assigned first to prevent the loading of any one alternative. Both the items and weightings for the matrix chart were determined by public comment and the Stakeholder Concept Teams which were part of the public involvement process and helped in identifying the issues and concerns for this project.

An item rating was then assigned from 0-5 for each of the three alternatives. The rating criteria are described below. This item rating was evaluated singularly and the value assigned to each alternative in relation to the other alternatives. The individual item alternative rating was then multiplied by the weight of importance factor to calculate the total rating for that item on each alternative. These individual totals were then combined to form a total score for each of the three alternatives, with the highest score indicating the best over-all alternative, or the preferred alternative.

Due to the fact that each of the three alternatives could each serve the needs of this area, the matrix was used to guide the project to the alternative that had the highest over-all cumulative benefits for all of the main items of concern.

## SELECTION MATRIX CRITERIA

ECONOMIC IMPACTS — Negative effects to the local economy, including the economic impact during the construction phase, resulted in a lower rating. This item does not consider construction cost which is a separate item for rating purposes.

SOCIAL IMPACTS — Beneficial effects, or the lack of negative effects, to community services, neighborhoods, residential areas and social groups such as the elderly, handicapped, non-drivers, transit-dependent, minority and ethnic groups resulted in a higher rating.

RELOCATION IMPACTS — Negative effects of relocating displaced individuals and businesses resulted in a lower rating.

AIR QUALITY IMPROVEMENT — Reduction of congestion through elimination of bottlenecks to reduce stopping and idling and to smooth traffic flow resulted in a higher rating. Other positive factors include bicycle lanes and facilities and measures to encourage the use of non-motorized transportation. These air quality improvement factors resulted in a higher rating.

NOISE IMPACTS — An increase in noise levels to private and commercial property resulted in a lower rating.

ENERGY IMPACTS — The use and encouragement of energy-saving measures (e.g. bicycle/pedestrian facilities and traffic congestion mitigation) resulted in a higher rating.

FLOODPLAIN IMPACTS — Encroachment on or incompatible development with the floodplain resulted in a lower rating.

WETLANDS IMPACTS — Detrimental effects on wetlands resulted in a lower rating. Water quality and river hydrology are a separately rated item.

LAND USE IMPACTS — The ability to better utilize the land for the planned intent resulted in a higher rating.

HISTORICAL AND ARCHAEOLOGICAL IMPACTS — Any identified impact to historical or archaeological sites or structures resulted in a lower rating.

WATER QUALITY IMPACTS (INCLUDING BRIDGE DRAINAGE) — Degradation in water quality, including construction activities, drainage and runoff from the bridge deck, resulted in a lower rating. Wetlands is a separately rated item.

THREATENED OR ENDANGERED SPECIES — Any negative impact to threatened or endangered species resulted in a lower rating.

CONSTRUCTION IMPACTS — Negative effects of the construction phase of the project on traffic, access and the environment resulted in a lower rating. This includes the size (i.e. sprawl vs. compactness)of the construction work area but does not include the construction cost or the economic impact each of which is separately rated.

PEDESTRIAN (ACCESS / FUNCTIONALITY) — Beneficial effects from improved pedestrian access across the Clark Fork River and to the Riverfront Parks and Trails resulted in a higher rating. This includes the functionality and ease of use of the access. Safety and Americans with Disabilities Act considerations are separately rated items.

BICYCLES (COMMUTERS / CASUAL / RECREATIONAL) — The project takes into consideration the different types of bicyclists and their dissimilar needs and wants. These different types include commuter bikers who want to get from Point A to Point B in the most direct manner in the least time (usually alongside vehicles on the roadway), and casual bicyclists who may bike for recreation or physical fitness. Casual bikers also include children going to school, and others going to downtown stores and shops or to parks and trails along the river. Casual bicyclists do not necessarily have the need or desire for speed and directness. Improvements to bicycle transportation across the Clark Fork River and bike access to the riverfront parks and trails resulted in a higher rating. Bicycle safety is a separately rated item.

STREAM MODIFICATION (PIER HYDRAULICS) — New piers affect river hydraulics unless mitigating measures are taken. An increasing potential for stream modification resulted in a lower rating even though mitigation is planned for all improvements.

WILDLIFE IMPACTS (INCLUDING NESTING AREAS) — Negative effects on wildlife resulted in a lower rating. This includes the nesting areas for a variety of common birds in the area.

VISUAL / VISTAS — Visual impacts from residential, commercial or traffic perspectives resulted in a higher or lower rating depending on if the view would be improved or impaired. This also includes vistas *from* the bridge (including increased or improved opportunities for such vistas), and *of* the bridge and surroundings.

OPEN SPACE IMPACTS — Negative effects on or reduction in urban open space resulted in a lower rating. Maintaining or improving the natural setting was considered to be a positive effect.

PARKS / RECREATION SECTION 4(f) / 6(f) — Impacts to public parks and recreation lands resulted in a lower rating.

ROADSIDE DEVELOPMENT — Negative impacts on highway aesthetics or on the blending with the natural social and cultural environment of the area resulted in a lower rating. The consideration of the roadside landscaping and the preservation of valuable scenic views was a positive impact.

HAZARDOUS WASTE — Increased potential for hazardous waste contamination resulted in a lower rating.

SAFETY - RIVER — Improvements to safety for people on the water using the river (e.g. safer pier design) resulted in a higher rating.

SAFETY - VEHICLE — Improvements to vehicular safety while in the corridor, accessing the corridor and crossing the bridge (e.g. increased clear sight distance) resulted in a higher rating.

SAFETY - BICYCLE — Improvements to bicycle safety for the various types of bicyclists (e.g. bike lanes and safe access to riverfront parks and trails) resulted in a higher rating.

SAFETY - PEDESTRIAN — Improvements to pedestrian safety (e.g. separation and physical barrier from vehicles and bikes, openness of the area and lighting) resulted in a higher rating. This includes improved safety for those with disabilities, the elderly, families and children (e.g. discouraging transient and panhandler activities).

INTERSECTIONS - FIRST / FRONT FUNCTION — Beneficial effects to the functionality of the intersections of Orange Street with Front/ Main Street on the north and First Street on the south resulted in a higher rating. This includes the operation of the intersection and level of service.

TRAFFIC FLOW IMPACTS — Positive effects to smoother flow of traffic resulted in a higher rating.

TRAFFIC PATTERNS - DOWNTOWN — Facilitating access to the downtown business community resulted in a higher rating.

TRAFFIC PATTERNS - NEIGHBORHOODS — Impacts which tend to keep through-traffic on main roadways and out of residential neighborhoods resulted in a higher rating.

CREGG LANE / INTERSECTION / ACCESS — Since Cregg Lane is the primary access to the McCormick Park complex, improvements to the intersection with Orange Street and to the alignment of Cregg Lane resulted in a higher rating. This includes consideration of future development in the park complex, impacts from events in McCormick Park and minimization of traffic in adjacent neighborhoods.

ACCESS FROM ROADWAY TO TRAILS — Improved bicycle/pedestrian access from Orange Street to the trails, especially along the riverfront, resulted in a higher rating.

AREA AESTHETICS / LANDSCAPING IMPACTS — Beneficial effects to the aesthetics of the overall corridor and area resulted in a higher rating.

BRIDGE DESIGN (AESTHETICS / FUNCTION) — Positive effects to the beauty of the bridge and to the functionality, ease and enjoyment of use resulted in a higher rating.

RAILROAD TRAIL DESIGN — Removal of the deteriorated old Milwaukee Railroad overpass presents several alternatives for the trail that follows the abandoned railroad right-of-way including a new trail underpass (under Orange Street) or looping the trail out to the Riverfront Trail System and under the Orange Street Bridge. Alternatives that altered the railroad trail resulted in a lower rating.

ADA CONSIDERATIONS — The Americans with Disabilities Act (ADA) includes requirements for greater accessibility. Improvements which exceed these requirements or provide accessibility where there previously was none (or limited) resulted in a higher rating.

COST — Cost considerations include not only construction costs but also longer term maintenance and repair costs. The greater the costs, the lower the rating.

*Table 2.* ***ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT ALTERNATIVE SELECTION MATRIX - ROADWAY BRIDGE***

| ITEM | WEIGHT OF IMPORT 0 - 5 | ALT. R1 | | ALT. R2 | | ALT. R3 | | NO-BUILD | |
|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Total | Rating | Total | Rating | Total | Rating | Total |
| Economic (Construction Phase) | 3 | 3 | 12 | 4 | 12 | 4 | 12 | 5 | 20 |
| Social | 3 | 4 | 12 | 5 | 15 | 5 | 15 | 4 | 12 |
| Relocation | 2 | 3 | 9 | 4 | 9 | 3 | 9 | 5 | 12 |
| Air Quality | 5 | 4 | 20 | 5 | 25 | 5 | 25 | 1 | 8 |
| Noise | 3 | 2 | 6 | 2 | 6 | 2 | 9 | 4 | 12 |
| Energy | 2 | 4 | 9 | 5 | 15 | 5 | 10 | 1 | 15 |
| Floodplain | 3 | 3 | 6 | 4 | 9 | 5 | 15 | 4 | 20 |
| Wetlands | 5 | 5 | 25 | 5 | 25 | 5 | 25 | 5 | 25 |
| Land Use | 3 | 4 | 12 | 5 | 15 | 5 | 15 | 2 | 6 |
| Historical & Archeaological | 5 | 3 | 20 | 4 | 20 | 4 | 20 | 5 | 15 |
| Water Quality (Bridge Drainage) | 3 | 3 | 12 | 4 | 15 | 4 | 10 | 5 | 9 |
| Threatened / Endangered Species | 5 | 4 | 20 | 4 | 20 | 4 | 20 | 5 | 9 |
| Construction | 3 | 3 | 12 | 2 | 9 | 2 | 8 | 5 | 25 |
| Pedestrian (Access/Functionality) | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 1 | 9 |
| Bicycles (Commute/Casual/Rec) | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 1 | 15 |
| Stream Modification (Pier Hydr) | 3 | 3 | 12 | 4 | 12 | 5 | 20 | 4 | 12 |
| Wildlife (Nesting Areas) | 5 | 4 | 20 | 4 | 20 | 4 | 20 | 5 | 12 |
| Visual/Vistas | 5 | 4 | 15 | 5 | 25 | 5 | 25 | 2 | 20 |
| Open Space | 3 | 3 | 12 | 5 | 20 | 5 | 20 | 2 | 6 |
| Parks/Recreation (Sect. 4(f)/6(f)) | 5 | 3 | 15 | 4 | 20 | 4 | 20 | 5 | 6 |
| Roadside Development | 1 | 4 | 6 | 5 | 5 | 5 | 5 | 2 | 15 |
| Hazardous Waste | 5 | 4 | 20 | 4 | 20 | 4 | 20 | 4 | 15 |
| Safety - River | 5 | 4 | 20 | 4 | 20 | 5 | 25 | 3 | 12 |
| Safety - Vehicle | 5 | 4 | 20 | 5 | 25 | 5 | 25 | 1 | 9 |
| Safety - Bicycle | 5 | 4 | 20 | 5 | 25 | 5 | 25 | 1 | 5 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Safety - Pedestrian | 5 | 5 | 25 | 5 | 25 | 5 | 25 | 2 | 10 |
| Intersections - First/Front Funct. | 5 | 5 | 25 | 5 | 25 | 5 | 25 | 2 | 10 |
| Traffic Flow | 4 | 4 | 16 | 5 | 20 | 5 | 20 | 2 | 8 |
| Traffic Patterns - Downtown | 4 | 5 | 20 | 5 | 20 | 5 | 20 | 2 | 8 |
| Traffic Patterns - Neighborhoods | 4 | 4 | 16 | 5 | 20 | 5 | 20 | 2 | 8 |
| Cregg Lane/Intersection/Access | 5 | 4 | 20 | 5 | 25 | 5 | 25 | 1 | 5 |
| Access from Roadway to Trails | 4 | 4 | 16 | 5 | 20 | 5 | 20 | 1 | 4 |
| Area Aesthetics/Landscaping | 5 | 3 | 15 | 4 | 20 | 5 | 25 | 2 | 10 |
| Bridge Design(Aesthet./Function) | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 4 | 20 |
| Railroad Trail Design | 4 | 3 | 12 | 3 | 12 | 3 | 12 | 5 | 20 |
| ADA Considerations | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 1 | 5 |
| Cost | 3 | 2 | 6 | 3 | 9 | 3 | 9 | 5 | 15 |
| **TOTAL SCORE** | | | **565** | | **677** | | **701** | | **455** |

Table 2. Roadway Bridge (Continued)

Based on the tabulations of the Selection Matrix for the Roadway Bridge, the following is a summary of the considered alternatives ranked in the order of their preference:

1. **R3** (701) Remove and Replace existing bridge with new 2 span structure - lower grade - remove railroad underpass - relocate Cregg lane. Bike lanes and Sidewalks. **PREFERRED ALTERNATIVE**

2. **R2** (666) Remove and Replace existing bridge with new 3 span structure - lower grade - remove railroad underpass - relocate Cregg lane. Bike lanes and Sidewalks.

3. **R1** (565) Refurbish and widen existing bridge - same grade - complementary additional structure (steel girder) - remove railroad underpass - lower grade slightly - realign Cregg lane. Bike lanes and Sidewalks.

4. **RNB** (455) "No-Build"

Note that there is not a large difference between R3 and R2 and they may both serve the purpose for which the structure is intended. The primary difference is the impact to the river as a result of an additional pier. Alternative R3 shows the highest overall benefit. Re-using the existing bridge and the "No-Build" are much less favored and should not be considered for this project.

### *Table 3.* *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT ALTERNATIVE SELECTION MATRIX - PEDESTRIAN/BICYCLE BRIDGE*

| ITEM | WEIGHT OF IMPORT 0 - 5 | ALT. PB1 Rating | Total | ALT. PB2 Rating | Total | ALT. PB3 Rating | Total | NO-BUILD Rating | Total |
|---|---|---|---|---|---|---|---|---|---|
| Economic (Construction Phase) | 3 | 4 | 16 | 4 | 16 | 5 | 20 | 5 | 20 |
| Social | 3 | 4 | [illegible] | 4 | 12 | 5 | 16 | 3 | 12 |
| Relocation | 2 | 5 | 16 | 5 | 16 | 5 | 16 | 5 | 16 |
| Air Quality | 5 | 4 | 20 | 5 | 25 | 5 | 25 | 2 | 16 |
| Noise | 3 | 3 | 12 | 3 | 12 | 4 | 16 | 5 | 20 |
| Energy | 2 | 3 | 8 | 5 | 16 | 5 | 15 | 2 | 12 |
| Floodplain | 3 | 5 | 15 | 4 | 12 | 3 | 12 | 5 | 15 |
| Wetlands | 5 | 5 | 25 | 5 | 25 | 5 | 25 | 5 | 25 |
| Land Use | 3 | 4 | 12 | 5 | 16 | 5 | 15 | 3 | 9 |
| Historical & Archeaological | 5 | 5 | 25 | 4 | 20 | 4 | 20 | 5 | 25 |
| Water Quality (Bridge Drainage) | 3 | 5 | 20 | 4 | 16 | 4 | 16 | 5 | 20 |
| Threatened / Endangered Species | 5 | 5 | 25 | 4 | 20 | 4 | 20 | 5 | 25 |
| Construction | 4 | 3 | 15 | 4 | [illegible] | 2 | 8 | 5 | 20 |
| Pedestrian (Access/Functionality) | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 4 | - |
| Bicycles (Commute/Casual/Rec) | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 4 | - |
| Stream Modification (Pier Hyd.) | 4 | 5 | 20 | 2 | [illegible] | 3 | 12 | 5 | 20 |
| Wildlife (Nesting Areas) | 5 | 4 | 20 | 2 | 16 | 3 | 15 | 5 | 25 |
| Visual/Vistas | 5 | 2 | 16 | 4 | 20 | 4 | 15 | 5 | 25 |
| Open Space | 4 | 4 | 16 | 3 | 12 | 2 | [illegible] | 5 | 20 |
| Parks/Recreation (Sect. 4(f)/6(f)) | 5 | 5 | 25 | 5 | 25 | 5 | 25 | 5 | 25 |
| Roadside Development | 1 | 3 | - | 4 | [illegible] | 3 | 3 | 5 | - |
| Hazardous Waste | 5 | 3 | 20 | 4 | 20 | 3 | 20 | 4 | 20 |
| Safety - River | 5 | 5 | 25 | 4 | 20 | 3 | 20 | 5 | 25 |
| Safety - Vehicle | 5 | n/a | - | n/a | - | n/a | - | n/a | - |
| Safety - Bicycle | 5 | 2 | 16 | 5 | 25 | 5 | 25 | 3 | - |
| Safety - Pedestrian | 5 | 2 | 16 | 5 | 25 | 5 | 25 | 2 | 16 |
| Intersections - First/Front Funct. | 5 | n/a | - | n/a | - | n/a | - | n/a | - |
| Traffic Flow | 4 | n/a | - | n/a | - | n/a | - | n/a | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Traffic Patterns - Downtown | 4 | n/a | - | n/a | - | n/a | - | n/a | - |
| Traffic Patterns - Neighborhoods | 4 | 4 | 16 | 3 | 12 | 5 | 20 | 1 | 4 |
| Cregg Lane/Intersection/Access | 5 | 4 | 20 | 4 | 20 | 5 | 25 | 3 | 15 |
| Access from Roadway to Trails | 4 | 4 | 16 | 4 | 16 | 5 | 20 | 1 | 4 |
| Area Aesthetics/Landscaping | 5 | 2 | 10 | 3 | 15 | 4 | 20 | 5 | 25 |
| Bridge Design(Aesthet./Function) | 5 | 3 | 15 | 5 | 25 | 5 | 25 | 3 | 15 |
| Railroad Trail Design | 4 | n/a | - | n/a | - | n/a | - | n/a | - |
| ADA Considerations | 5 | 2 | 10 | 4 | 20 | 4 | 20 | 1 | 5 |
| Cost | 3 | 3 | 9 | 3 | 9 | 4 | 12 | 5 | 15 |
| **TOTAL SCORE** | | | **498** | | **533** | | **573** | | **496** |

Table 3. Pedestrian/Bicycle Bridge (Continued)

Based on the tabulations of the Selection Matrix for the Pedestrian/Bicycle Bridge, the following is a summary of the considered alternatives ranked in the order of their preference:

1. **PB3** **(573)** Separate bridge downstream of road bridge - end of trail on north side. **PREFERRED ALTERNATIVE**

2. **PB2** (533) Separate bridge upstream of road bridge - below island.

3. **PB1** (498) Attached bridge underneath (alongside) road bridge.

4. **PBNB** (496) "No-Build".

Note that there is not a large difference between PB3 and PB2 and they both may serve the purpose for which the structure is intended. PB1 and PBNB are almost identical in their rating, which would indicate that if a separate pedestrian/bicycle bridge is to be built that it probably should be a detached structure rather than connected to the road bridge.

## 3.5 Alternatives Eliminated From Consideration

The project alternatives that were eliminated from consideration and the reasons for their exclusion are discussed below.

### Roadway

Install a New Trail Underpass at the location of the Milwaukee Railroad Bridge.

Due to the width of the proposed 5-lane roadway at this location, an underpass would have a definite tunnel effect. The "tunnel" would need to be approximately 45-60 meters (150-200 feet) long and even though lighting could be provided, it was the general feeling of the public input received on this matter that they did not want another "tunnel" that people would not use. Another concern was the encouragement of transient presence that the underpass would create and an associated safety concern of pedestrians and bicyclists, as well as the local neighborhood residents. The close proximity of an alternate crossing under the roadway at the riverfront trail and the easy connection back to the Milwaukee Trail was another consideration. The added expense of an additional structure at this location did not seem to be warranted.

Remove and Replace River Crossing at Same Elevation

Completely replacing the river bridge at the same elevation as it now exists would require additional costs due to the higher pier configuration necessary and the additional earthwork involved with the higher fills. The higher grades would not be necessary with the absence of the Milwaukee Railroad Bridge as it was the controlling height element when the bridge was first built. The higher grades also make it more difficult to access the parks and riverfront trail system within the ADA design requirements. The higher fills would also encroach on the parks system which would require additional right-of-way on park land, which is not acceptable if other practicable or feasible alternatives are available according to Federal regulations.

Widen and Refurbish Old Milwaukee Railroad Bridge

The existing bridge is a three span concrete structure that is deteriorating and in need of major repairs. The spans are no longer needed for the purpose for which they were built as the railroad line has been abandoned. The existing canal and trail beneath the bridge can be accommodated by other means other than the existing 9 meter (30 foot) high structure. The continued maintenance of a structure of this size would be costly. Major renovation efforts would also be required to improve both vehicular and pedestrian safety. With a widened road section, additional widening of the structure would also be required at a relatively high cost. The removal of the structure will also allow the re-alignment of Cregg Lane so that it intersects Orange Street at a perpendicular intersection rather than an acute angle. This will improve access to McCormick Park and other facilities to the west and will improve the safety of this intersection. Due to the lack of need for this structure and the other elements discussed above, this alternative was eliminated.

### Refurbish and Widen the Existing Orange Street Bridge

Upgrading and refurbishing the existing Orange Street bridge to accomodate a new 4-lane roadway configuration would be difficult and expensive. The existing deck is in need of replacement and several steel truss members must be repaired and strengthened. The main truss connections at the piers are badly corroded and should be repaired. The existing structure would also have continued high maintenance costs due to its age. The loadings that have been used on the structure have brought it near its fatigue life which would require a total replacement within the next 20 years. Matching the structure with a complementary structure that would be aesthetically pleasing in a setting that has high visibility would be very difficult. This is particularly true in this location as the majority of the view of the bridge would be along the riverfront trail system and adjacent parks which are at the river level. The residents of the Clark Fork Manor would also view the structure on a daily basis. Due to these compounding elements, it was determined that this alternative would not be an acceptable one.

## Trails

### Separate River Crossing at Location "D" Downstream of the Orange Street Bridge

The location "D" was approximately half way between the Orange Street Bridge and the MRL Railroad crossing. It was considered as it is the shortest span location on this section of the river. The costs would be less at this location but the other elements were not very favorable. The connection to the riverfront trail system would be more difficult as the banks are very steep on the north side of the river and there is currently no access along the trail on the north side. The bridge would have a grade that would be marginal for ADA requirements. The location would not encourage increased use of non-motorized modes of transportation due to its access and location.

Separate Bridge over the West End of the Island Complex

This alternative was one that has been considered on several previous occasions and has had considerable public comment and involvement associated with it. It was probably one of the more preferred alternatives by the downtown population, but was very much disliked by the residential neighborhood population. In the public involvement process, this alternative was being considered. The City Council passed a Resolution for the creation of an Island Sanctuary on the large island immediately upstream of the Orange Street Bridge. In this resolution, it was stated that no bridge pier would be allowed on the island. The City Council also stated during the course of this Resolution that it was no longer necessary to consider this site as an option for a separate pedestrian/bicycle bridge as the majority of the council felt that adequate public comment had been received on the issue and they were not willing to have it debated further. This option was therefore removed from consideration. A copy of the resolution is included in Appendix 1.

Due to the continued public interest in a separate pedestrian/bicycle bridge upstream from the Orange Street Bridge, *Alternative PB2 - Separate Bridge upstream of road bridge - below island* was considered. This alternative was also eliminated from consideration due to the environmental impacts, length of structure, considerable public input regarding the undesirable encouragement of people to access the southside neighborhood from the northside commercial area, and the undesirable impacts to the established Clark Fork Riverside Retirement Center complex. Also, many public comments expressed concern about the visual impairment that an additional river structure at this location would create even though the trail bridge might be aesthetically pleasing in and of itself. The desire to maintain the island complex in its natural setting was very evident.

Attached Bridge Underneath (alongside) Road Bridge.

This alternative initially seemed to be the most logical as it would utilize the road bridge structure for support and an additional detached structure would not be needed. There was considerable public comment against this alternative due to safety and aesthetic reasons, including a closed-in feeling, danger and inconvenience from road debris from the vehicle bridge, lack of natural light, impaired visuals and vistas, and from being out-of-sight from general public view (especially for those with disabilities, the elderly and children). There was also a great concern that it would attract the transient population to frequent the area. It was determined that it would not encourage the additional usage of non-motorized modes of transportation nearly as much as the separate structure due to the safety, aesthetic and the more welcoming, inviting (user friendly) values of a separate bridge. It would also be difficult to connect to the trail system in a desirable fashion because of the restrictions at the bridge ends imposed by the road bridge abutments.

Separate River Crossing near the Higgins Avenue Bridge.

A recommendation to place the trail bridge near the Higgins Avenue Bridge was eliminated due to the excessively long span, associated costs, and impacts to the river of this alternative.

## 3.6 Proposed Action

Based on the comparative analysis of the various alternatives, the public involvement process and the information obtained from the alternative selection matrix, Roadway Alternative **R3 (Remove and replace with new 2-span structure - lower grade)** has been selected as the preferred alternative for the construction of the Orange Street Bridge along with alternative **PB3 (Separate bridge downstream of road bridge)** for the Pedestrian/Bicycle bridge for the Riverfront Access. These alternatives will substantially improve the traffic congestion, air quality and safety concerns along this section of the Orange Street corridor. The trail bridge will encourage the use of non-motorized modes of transportation and reduce the total vehicle miles travelled. The preferred alternatives possess the following advantages:

### Roadway Bridge

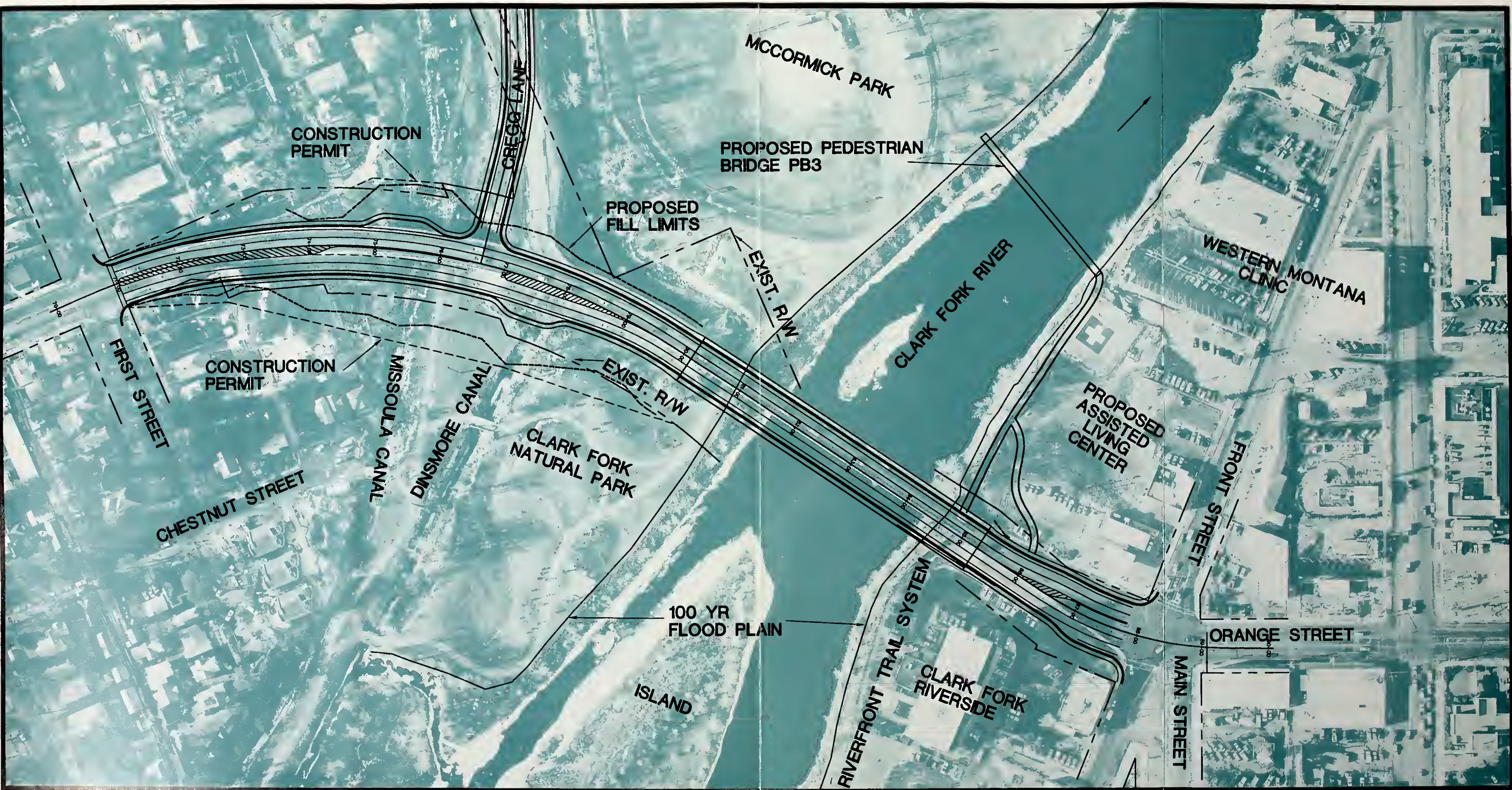
* Provides the most beneficial improvements to the traffic congestion on Orange Street and improves the air quality.
* Has the least environmental impacts.
* Low over-all estimated construction costs.
* Provides the most economical and direct access to the adjacent parks and riverfront trail system.
* Provides the best solution to the safety concerns at the Cregg Lane intersection.
* Is aesthetically pleasing and provides a more open setting along the riverfront.
* Has the least impacts to the existing parks.
* Minimizes impacts to the river system.
* Keeps traffic on the main corridor rather than through the local neighborhoods.
* Provides for commuter bike lanes alongside the vehicles encouraging non-motorized transportation and improving commuter bike safety.

### Pedestrian/Bicycle Bridge

- Encourages more use of non-motorized modes of transportation by providing better access to the existing trail system and a downtown loop connection at the trail level. (See map of city wide trail sytem in the Appendix 1)
- Helps to improve the air quality by reducing the total VMT with increased pedestrian and bicycle activity.
- Provides a trail to trail connection at the riverfront level for better access to the trail system.
- Provides direct access to McCormick Park from the north side of the river and allows for easy pedestrian and bicycle access to major events within the park.
- Utilizes the existing parking facilities in McCormick Park for access to the riverfront trail rather than the parking along the local neighborhood streets.
- Reduces the need to continue the riverfront trail on the north side of the river in a segment where the terrain is very unfavorable and significant environmental impacts could occur.
- In conjunction with other parking facilities in the parks, provides access to overflow parking for the central business district (CBD) on-street parking and further reduce VMT with access to the CBD across the river while parking outside the CBD.
- Provides excellent access for the elderly and disabled populations in the nearby existing retirement center and proposed assisted living center, thus also contributing to reduction in VMT.

The preferred roadway alternative, shown in ***Figure 15***, will require an approximate 809 $m^2$ (0.20 acres) of additional right-of-way be acquired and will have the least impacts to the environment. No additional right-of-way will be needed from the adjacent parks. The design will be consistent with the City of Missoula roadway standards, MDT Design Standards and Specifications for Urban Highway construction and the MDT geometric standards. All design procedures will also be in accordance with current American Association of State Highway and Transportation Officials (AASHTO) standards and specifications, including bicycle features and facilities. ***Figure 15A*** shows the existing and proposed bike/pedestrian trails for the area around Orange Street, with McCormick Park as the focal point for the trail junctions.

The "no-build" alternative was fully evaluated and used as the baseline for the other alternatives during the selection process. This alternative has several disadvantages compared to the proposed action. It creates additional congestion as the traffic demands increase; reduces air quality with increased congestion; will not meet current ADA requirements for access to the riverfront and along the existing sidewalks; does not remedy the pedestrian and bicycle safety problems on the existing bridge; does not encourage increased use of non-motorized modes of transportation; and does not provide easy access to the riverfront trail system. It would also not reduce or correct the existing access and safety concerns presented by the existing roadway. This alternative was therefore not selected to be in the best interest of the Missoula community.



# ORANGE STREET BRIDGE AND RIVERFRONT ACCESS

STPU [illegible] 7(10)
MISSOULA, MONTANA

PREFERRED ALTERNATIVE

R3

FIGURE 15

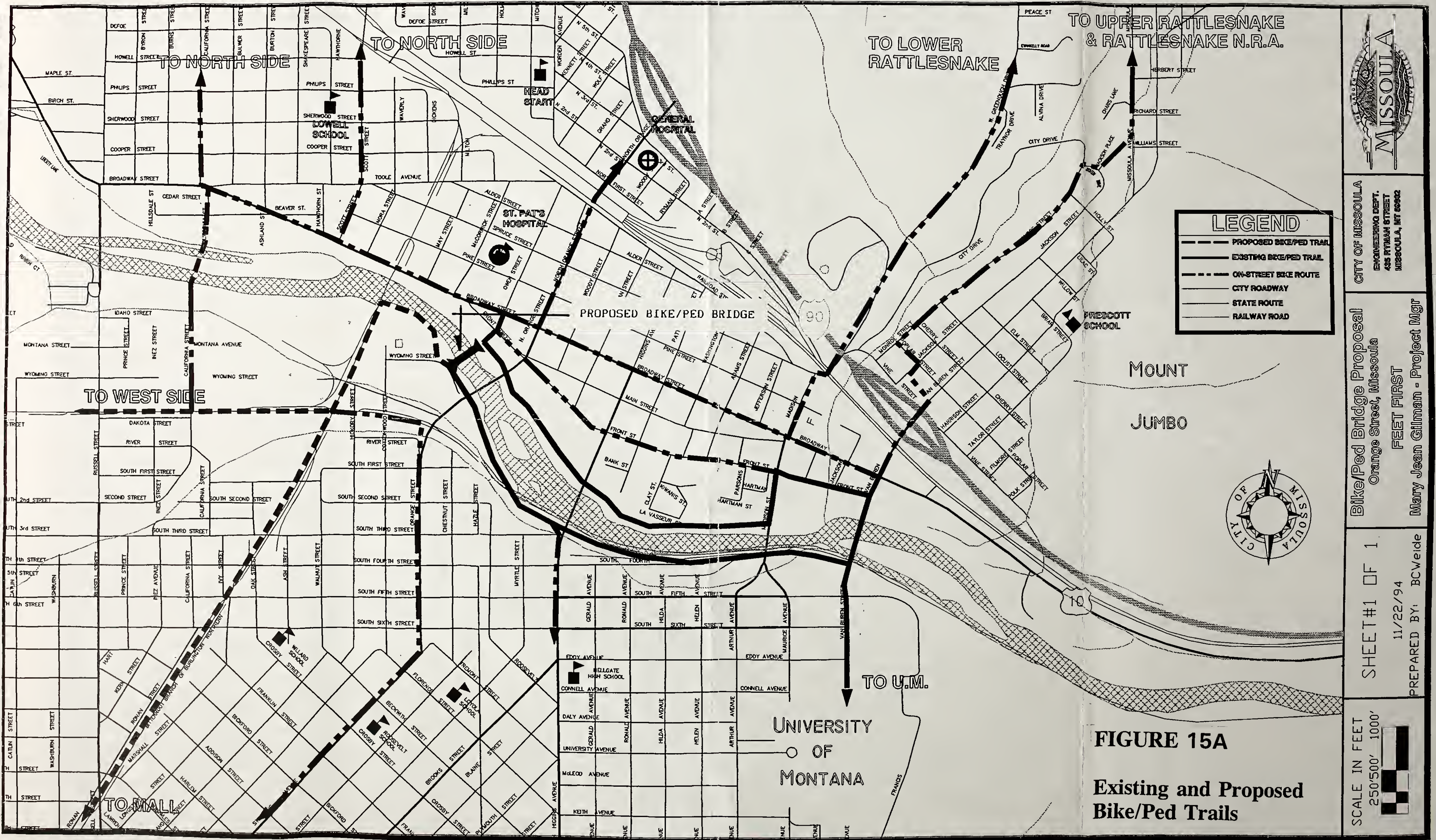


FIGURE 15A

Existing and Proposed Bike/Ped Trails

# SECTION 4. IMPACTS AND MITIGATION MEASURES

According to 23 CFR Part 771.119, the environmental assessment must examine specific environmental categories to determine if the potential impacts to the proposed project area are significant. This document relies on consultations with agencies that manage or safeguard environmental resources to supplement analytical procedures as the primary means of identifying impacts. The following narrative summarizes the results of the agency coordination and analyses conducted for each impact category.

## 4.1 SOCIAL AND ECONOMIC IMPACTS

The Missoula County population has remained relatively stable over the past 10 years. Between 1980 and 1990 Missoula County grew by about 2500 persons or 250 persons per year. This growth has increased in the past 3 years to a rate of about 1800 persons per year.

Figures in ***Table 4*** show the population growth pattern in the Missoula area. As can be seen, the large increase is due largely to the migration into the Valley from other parts of the country. This influx of new population will naturally bring with it new ideas and new industry.

Another indicator of the social and economic growth within this area is found in the increase in the number of building permits as well as the valuation of the construction. ***Table 5*** provides the building permit history for Missoula County over the past 10 years. This has always been a very cyclic portion of Missoula's economy and there is currently a substantial growth spurt in the area. Building permits hit a low in 1989 and have since been growing steadily until 1992 when they almost doubled. The valuation for the permits also hit an all-time high in 1994 at an estimated $99,000,000. The majority of these permits were for residential dwellings.

Missoula's economy has also been somewhat cyclic over the past decades. In the past, the primary influencing factor in the economic trend for the Missoula Valley has been the wood products industry. Although this remains a very important part of the economy of this area, the emphasis is slowly shifting away from this wood product base as the ability to continue to remain competitive in a very sensitive area has decreased. Over the last decade, the economy within the Valley and surrounding area has been relatively stable and the County is continually working toward diversification of its economic base.

*Table 4.* ***MISSOULA COUNTY POPULATION GROWTH (1980 - 1992)***

| | Pop. Est. | Births | Deaths | Nat. Increase | Net Mig. |
|---|---|---|---|---|---|
| 1980* | 76,016 | 1,385 | 488 | 897 | -500 |
| 1981 | 76,400 | 1,358 | 486 | 872 | -2,100 |
| 1982 | 75,200 | 1,263 | 478 | 785 | -600 |
| 1983 | 78,400 | 1,192 | 470 | 722 | 400 |
| 1984 | 76,500 | 1,282 | 484 | 785 | 0 |
| 1985 | 77,300 | 1,247 | 480 | 767 | 400 |
| 1986 | 78,500 | 1,246 | 529 | 717 | -500 |
| 1987 | 77,300 | 1,074 | 501 | 573 | -600 |
| 1988 | 77,300 | 1,123 | 496 | 627 | -500 |
| 1989 | 78,400 | 1,160 | 516 | 644 | -400 |
| 1990* | 78,687 | 1,095 | 501 | 594 | 1,200 |
| 1991 | 85,000 | 1,110 | 505 | 605 | 1,200 |
| 1992 | 82,300 | 1,110 | 550 | 550 | - |

* Census years
Source: Bureau of Business & Economic Research
NOTE: Data are estimates. Totals may not add due to rounding.

*Table 6* shows the trend in this diversification since 1985. From these figures, it can be seen that although the Wood/Paper Products industry still plays a very important role in the Missoula Economic Base, the Trade Center Activities have increased steadily over the past 10 years until it is now the major industry within the County. Motor Carriers has consistently remained as the third major industry in the area. The over-all total labor income has increased in the County approximately $100,000,000 every three years since 1985.

All of these factors indicate that the Missoula economic base is continuing to grow and diversify. With this growth pattern, it is natural to predict that the industries and work force associated with this growth will continue to increase. This project is designed to accommodate some of the transportation needs coincident with such growth.

*Table 5.* ***MISSOULA COUNTY BUILDING PERMITS*** - NEW CONSTRUCTION

| YEAR | RESIDENTIAL* | COMMERCIAL** | TOTAL | VALUATION |
|---|---|---|---|---|
| 1985 | 188 | 50 | 238 | $27,895,000 |
| 1986 | 172 | 39 | 211 | 18,570,000 |
| 1987 | 171 | 43 | 214 | 23,060,000 |
| 1988 | 133 | 37 | 170 | 14,765,000 |
| 1989 | 136 | 27 | 163 | 21,695,000 |
| 1990 | 189 | 43 | 232 | 24,905,000 |
| 1991 | 224 | 39 | 263 | 24,785,000 |
| 1992 | 416 | 55 | 471 | 58,090,000 |
| 1993 | 583 | 42 | 625 | 59,838,000 |
| **1994** | **748** | **63** | **811** | **98,870,000** |

* Residential includes single family, duplex, and multi-family

** Commercial includes business, assembly, education, hazardous and institutional

The Missoula County population contains many different ethnic groups, none of which are a large percentage of the population. The general population consists of 96.1% White, 0.2% Black, 2.3% American Indian, 1.1% Asian, 0.3% Other.

There are no ethnic or community groups that live adjacent to the proposed project, therefore, none of the alternatives under consideration will change existing neighborhoods, nor will they isolate or split any ethnic or community groups, or separate residents from essential services. The proposed project will encourage traffic to stay within the Orange Street corridor rather than utilizing the local residential street network.

With additional accessibility provided by both the road bridge and the pedestrian bridge, the elderly population at the existing Clark Fork Riverside Retirement Center and the disabled population at the proposed assisted living center at the old Fox Theater site (northwest end of the project area) will be substantially benefitted.

## Table 6. MISSOULA COUNTY ECONOMIC BASE COMPARISON

| 1985 Basic Industry | abor Income ($ Million) | % of Base | 1987 Basic Industry | abor Income ($ Million) | % of Base | 1990 Basic Industry | Labor Income ($ Million) | $ of Base |
|---|---|---|---|---|---|---|---|---|
| Wood Products | $92.7 | 38% | Wood/Paper Products | $95.8 | 30% | **Trade Center Activity** | $133.8 | **31.3%** |
| Federal Government | 38.9 | 16% | **Trade Center Activity** | 60.9 | **19%** | Wood/Paper Products | 93.6 | 21.9% |
| Motor Carriers | 31.1 | 13% | Motor Carriers | 42.9 | 13% | Motor Carriers | 49.6 | 11.6% |
| University of Montana | 30.1 | 12% | Federal Government | 42.3 | 13% | Federal Government | 49.2 | 11.5% |
| **Trade Center Activity** | 21.0 | **9%** | University of Montana | 34.8 | **19%** | University of Montana | 41.0 | 9.6% |
| Railroads | 14.0 | 6% | Railroads | 13.0 | 4% | Selected Manufacturing | 25.7 | 6.0% |
| Other Manufacturing | 7.8 | 3% | Non-Resident Travel | 12.1 | 4% | Railroads | 15.8 | 3.7% |
| Mining & Agriculture | 4.6 | 2% | Other Manufacturing | 11.6 | 4% | Non-resident Travel | 14.1 | 3.3% |
| Lodging | 3.4 | 1% | Agriculture & Mining | 6.3 | 2% | Agriculture & Mining | 4.7 | 1.1% |
|  | $243.9 |  |  | $319.5 |  |  | $427.6 |  |

Source: Bureau of Business & Economic Research

*Executive Order #12895 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* was reviewed for this proposed project. Implementation of the preferred alternative will not create disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

The proposed action will not adversely impact any school district, church, city or county service. No social group will derive specific benefits or be harmed by this project. It is not anticipated that there will be any disruptive effects on the community other than short term minor delays in traffic during construction. Any effect that does occur will be beneficial as the revised bridge will provide a safer and more readily accessible route for school buses, mail carriers, ambulances, and any other public service vehicles which serve the area. It will also provide easier and better access across the Clark Fork River to the central business district. The flow of traffic will be improved and the overall traffic patterns will change only slightly.

This project will *not* have any significant adverse effect on existing public services and facilities.

The proposed action will have a significant *positive* economic impact to the area both short term during the construction of the project as well as long term by providing better access to the business district. The short term benefits will include employment opportunities and local spending by the construction forces.

## 4.2 RELOCATION IMPACTS

This project will cause the displacement of one and possibly two residences and no businesses, and will not inhibit access to jobs, educational facilities, religious institutions, health and welfare services, recreational sites, social or cultural centers, or commercial facilities. The proposal will significantly facilitate access to these institutions by providing more efficient alternate access routes, a safer route for travel and an improved roadway system. The owner of the buildings that will need to be acquired for right-of-way has been contacted and is not opposed to the project. The people renting the homes will have sufficient time to find accommodations elsewhere and have assistance available through the Montana Department of Transportation's Relocation Assistance Program.

## 4.3 LAND USE IMPACTS

The current land use in this area is primarily residential, parks and business. It is currently zoned for R-II, P-I, P-II and C. It consists of a narrow strip of land between 1st Street on the south and Front Street on the north. This is the main access corridor for McCormick Park and also provides access for the Clark Fork Natural Park and the Riverfront Trail system. The current access is very undesirable as the volume of traffic makes it very difficult to both enter and leave the McCormick park area.

The No-Build alternative would do nothing to improve this access and does not provide for adequate and safe access to the area for the zoned land uses under the current conditions. The problem will continue to grow as the traffic volumes increase. There is no direct access to the riverfront trail system from the Orange Street corridor as the roadway is much higher than the riverfront trails due to the old railroad overpass. This also will not change under the No-Build alternative.

The construction of the proposed alternative will greatly improve the roadway access to these sites and will allow safer turning movements into the Park complex. Should additional developments be built in the McCormick Park area, the need for a turning lane will increase. It will also provide much easier and safer access to the trail system as the roadway will be closer to the trails and the slopes will be much more gentle. This will allow for the design of trail access points from Orange Street that will meet the current ADA requirements.

It is estimated that about 6-12 meters (20-40 feet) of additional right-of-way will be needed on the east side of Orange Street at the south end of the project. The existing right-of-way varies considerably and the amount of additional right-of-way needed will be determined by the location of the construction limits plus 3 to 6 meters (10-20 feet) wherever possible. Additional right-of-way will not be required along the parks. Construction permits will be used for blending with the existing ground features and landscaping the area to coordinate with the existing park. The additional right-of-way needed for the Cregg Lane re-alignment is currently owned by the City.

The State regards the Clark Fork River as a "navigable waterway" on its reach in the area of this project. Therefore, under 70-16-201 and 70-1-202, M.C.A., the Montana Department of Natural Resources and Conservation (DNR&C, which now includes the former Montana Department of State Lands/DSL) has jurisdiction over the land under this present and proposed crossing. MDT will request the DNR&C to issue an easement if a new bridge is constructed under this proposed project's "build" alternatives. The DNR&C is also a Cooperating Agency on this proposed project's environmental documentation under the provisions of 23 CFR 771.111(d).

The alley just north of 1st Street on the east side of Orange Street will be redesigned to allow for the continued use by residents and refuse collectors but will be limited to a right turn only for both entering and exiting. This has been discussed with the landowners involved and does not create any undo hardships for any of them.

The proposed alternative will provide better access and use of the existing land for the purpose for which it is zoned. This alternative will have a minimal effect on any single landowner.

## 4.4 VISUAL IMPACTS

The alignment of the proposed project on Orange Street differs very little from that of the existing highway. The corridor is fixed on both sides and the distance between is very short. Therefore, the alignment and grade changes must be kept within the bounds of these controlling features. The visual impacts for the proposed project were examined from three different perspectives:

1. Residential perspective - how does the project affect the view of the local residents, and most specifically the Clark Fork Riverside Retirement Center and the Southside Neighborhood.

2. Commercial perspective - the visual impacts to the existing businesses and future development.

3. Trails and Parks perspective - what does the walking and bicycling public view as they travel along the riverfront trails and the parks on either side of Orange Street.

There are only a few trees along the roadway corridor that would be affected by the proposed alignment. These are mostly all cottonwoods and any that will require removal will be replaced with more desirable and longer lasting species. The existing vegetation will be protected as much as possible. Fill and cut slopes for the new roadway will be reseeded and planted with native species of grasses and erosion control measures implemented wherever needed.

The design of the bridge will be completed with visual aesthetics being of great importance. Lines and materials will be selected that will enhance the visual appearance as much as possible. Special consideration will be given to preserving and enhancing the beauty of the surrounding parks and riverfront corridor. Consideration will be given to the effects that traffic lights may have on the local homes and particularly those located west of Orange Street on the south end of the bridge. Landscaping which will blend and complement the existing surroundings and help shield the parks and homes from the roadway will also be included in the final design.

The proposed alternative will eliminate the old concrete railroad structure and will utilize much flatter slopes. This, along with the lower road grades, will blend naturally with the surrounding parks. See figures 10-14 in Section 3.2 for perspective views of the proposed roadway and trail bridges.

The No-build alternative would have no adverse visual impacts.

## 4.5 TRAFFIC IMPACTS

### 4.5.1 Traffic Forecasts

The City of Missoula has programmed an update of the city-wide transportation plan. This work will begin in late 1994 and will produce arterial traffic forecasts with an updated and calibrated traffic model (QRS II software). The existing QRS II model has been updated with new land use data and calibrated to provide forecasts for the ongoing Brooks-South-Russell intersections study project several miles south of the Orange Street project location. The current model has not been calibrated for arterials north of the Clark Fork River and in the vicinity of downtown Missoula. Model output was reviewed for use in evaluating the project, but was not incorporated due to the calibration problems. The traffic operations analyses for the Orange Street bridge widening project are based on future year traffic, which is based on historic traffic growth trends over the last decade (1984 to 1994). The forecast traffic growth on roadways has been compared with the traffic growth in the existing QRS II model vehicle trip tables as a reasonableness check. The Orange Street widening project should be tested in the city-wide traffic model when a calibrated model is available in 1995.

***Table 7*** below illustrates the projected growth patterns for the opening year 1998 and the design year 2015. The historical growth patterns from the year 1984 were observed in arriving at the growth rates shown below.

***Table 7. FORECAST ANNUAL TRAFFIC GROWTH RATES***

| Roadway | 1993 to 1998 | 1998 to 2015 |
|---|---|---|
| Orange Street | | |
| north of Main | 1.5% | 1.5% |
| south of Main | 2.0% | 1.5% |
| south of S. 3rd | 3.0% | 1.5% |
| Broadway | 2.5% | 1.5% |
| Main/Front Street | 2.0% | 1.5% |
| S. 3rd Street | 2.5% | 1.5% |

Source: HNTB, September 1994

The projected daily traffic volumes on Orange Street, Broadway, Main/Front Street, and S. 3rd Street are shown in ***Table 8***, for the years 1998 and 2015.

*Table 8. TWO-WAY ADT VOLUMES*

| Intersection | Year | North of Intersection | South of Intersection | East of Intersection | West of Intersection |
|---|---|---|---|---|---|
| Orange and Broadway | 1993 | 14,460 | 20,780 | 15,680 | 15,000 |
| | 1998 | 15,560 | 22,220 | 18,020 | 16,960 |
| | 2015 | 19,000 | 27,400 | 25,800 | 24,600 |
| Orange and Main/Front | 1993 | 20,780 | 20,020 | 6,920 | 5,080 |
| | 1998 | 22,220 | 21,600 | 7,700 | 5,600 |
| | 2015 | 27,400 | 26,340 | 9,700 | 6,960 |
| Orange and S. 3rd | 1993 | 20,020 | 17,500 | 6,900 | 2,980 |
| | 1998 | 21,600 | 21,200 | 8,500 | 3,700 |
| | 2015 | 26,340 | 33,100 | 12,600 | 5,600 |
| Source: HNTB, September 1994 | | | | | |

The peak hour counts for the year 1994 were factored down to obtain the 1993 existing year am and pm peak hour counts. For the opening year and design year pm peak hour volumes, a two-way K-factor of 0.10 (10 percent) was maintained across Orange Street, while it was maintained at 0.07 on Broadway and 0.08 on S. 3rd Street based on the 1994 pm peak hour counts. The K-factor is the percentage of ADT occurring in the peak hour. For this project it was based on observed traffic flow (count data) and assumed to hold through the project design year. ***Table 9*** shows the pm peak hour volumes for the existing year 1993 (factored down from year 1994 pm peak hour counts), opening year 1998 and design year 2015.

*Table 9. ORANGE STREET INTERSECTION P.M. PEAK HOUR VOLUMES*

| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Year | L | T | R | L | T | R | L | T | R | L | T | R |
| Broadway | 1993 | 130 | 530 | 110 | 80 | 640 | 70 | 60 | 310 | 20 | 160 | 490 | 90 |
| | 1998 | 150 | 550 | 120 | 100 | 650 | 80 | 80 | 330 | 40 | 180 | 520 | 120 |
| | 2015 | 190 | 620 | 150 | 130 | 750 | 120 | 100 | 430 | 100 | 220 | 570 | 150 |
| Main/Front | 1993 | 40 | 650 | 130 | 80 | 720 | 20 | 30 | 210 | 270 | 200 | 70 | 90 |
| | 1998 | 60 | 670 | 150 | 100 | 740 | 30 | 40 | 230 | 290 | 220 | 90 | 110 |
| | 2015 | 100 | 750 | 190 | 130 | 840 | 50 | 60 | 270 | 340 | 250 | 120 | 150 |
| S. 3rd | 1993 | 50 | 600 | 10 | 20 | 1130 | 20 | 200 | 50 | 60 | 10 | 100 | 30 |
| | 1998 | 60 | 610 | 20 | 30 | 1150 | 40 | 220 | 60 | 70 | 20 | 110 | 40 |
| | 2015 | 100 | 680 | 30 | 70 | 1250 | 70 | 270 | 90 | 100 | 20 | 110 | 70 |
| Source: HNTB, September 1994 | | | | | | | | | | | | | |

The am and pm peak-hour counts were obtained at all the three intersections of Orange Street with Broadway, Main/Front Street, and S. 3rd Street by DJ&A in April and May, 1994.

### 4.5.2 Traffic Operations Analyses

Traffic Network Study Tool (TRANSYT-7F) was used for the level-of-service (LOS) calculations for the three signalized intersections. LOS A represents a free-flow condition, with individual vehicles being unaffected by the presence of other vehicles. With the increase in delay a measure of driver discomfort, frustration, fuel consumption, and lost travel time, the level-of-service decreases. LOS D traffic operations represent the lower boundary of acceptable, stable traffic operations in an urban or suburban area. LOS E represents operating conditions at capacity and LOS F is a breakdown of flow conditions.

The existing signal timings have been used for the year 1993 LOS and the 1998 and 2015 no-build calculations, while the signal timings for the future years 1998 and 2015 build conditions have been optimized using TRANSYT-7F traffic simulation model. The signals at Orange Street and Broadway and Orange Street and Main/Front Street are time base coordinated and run on the same cycle length. The signal at Orange Street and S. 3rd Street is hardwire interconnected to the signals at Orange Street and S. 4th & 5th Streets. It was assumed that the signal connectivity remains the same and therefore the signal at Orange Street and S. 3rd Street was treated as an isolated intersection for the analysis and was analyzed separately, while the other two signals at Orange Street and Broadway and Orange Street and Main/Front Street were assumed coordinated, for the future years. Distance between the signals at South 3rd and Main/Front are long enough to permit independent analysis. The storage capacities for the left-turn storage bays for all the approaches have been coded into the model. It has been assumed that the storage remains unchanged.

Year 1993, 1998 and 2015 pm peak volumes were used for analysis of existing and future traffic conditions. The pm peak levels-of-service for the existing year 1993, opening year 1998, and design year 2015 at the three intersections with Orange Street are shown in ***Table 10*** below.

The intersections at Orange Street and Main/Front Street and Orange Street and S. 3rd Street operate at LOS D or worse under existing conditions (1993 traffic volumes). These two intersections would operate at LOS E or worse in the opening and design years for the no-build condition (signal cycle lengths and phasing unchanged from 1993 conditions). The intersection of Orange Street and Broadway would operate at LOS C and E in opening (1998) and design (2105) years, respectively, for the no-build condition. Poor level of service for the no-build condition is due to left-turners not getting enough green time because of the permissive green on the two-phase operation at these intersections. With a changed signal phasing, all the three intersections perform at a level-of-service (LOS) C or better for both the opening and design years.

*Table 10. INTERSECTION OPERATIONS*

| Arterial & Cross Street | 1993<br>Existing | 1998<br>No-Build | <br>Build | 2015<br>No-Build | <br>Build |
|---|---|---|---|---|---|
| Orange Street & Broadway | B | C | C | E | C |
| Orange Street & Main/Front Street | D | E | C | F | C |
| Orange Street & S. 3rd Street | E | F | C | F | C |

Note :Intersection level-of-service calculated by TRANSYT-7F, Release 6, Version 4.0. No-build condition is the 1993 signal cycle length and phasing. Build condition is the optimum cycle length and phasing calculated by TRANSYT-7F.

Source: HNTB, September 1994

The existing roadway lane configuration in this segment of Orange Street creates very difficult merge maneuvers and congestion due to the imbalance across lanes and the inefficient use of available signal green time at the intersections.

This short corridor has had numerous accidents in the last six years. ***Table 11*** shows the accidents by location and type for the area near the proposed project. The accidents involving rear-end collisions seem to be due in large part to the bottleneck created by the bridge and the long lines of traffic at the intersections. People are not anticipating the stop to be so far from the traffic light and this results in rear-end accidents. Turning accidents are also fairly common and occur mostly at the intersections.

***Table 11. ACCIDENT TYPES AND OCCURRENCES NEAR THE ORANGE STREET BRIDGE. (1988-1994)***

| Location | Turning | Rear End | Red Light | Merging | Other |
|---|---|---|---|---|---|
| Front/Main and Orange | 23 | 12 | 7 | 3 | 3 |
| Orange Street Bridge near Front | 0 | 13 | 0 | 1 | 1 |
| Cregg Lane and Orange | 2 | 9 | 0 | 1 | 0 |
| So. First and Orange | 1 | 6 | 2 | 0 | 3 |
| So. Second and Orange | 4 | 10 | 1 | 0 | 0 |
| So. Third and Orange | 10 | 5 | 4 | 2 | 1 |
| Totals | 40 | 55 | 14 | 7 | 8 |

As traffic continues to increase the potential for additional accidents in this segment will rise as drivers become more impatient and anxious to get through the bottleneck. The proposed bridge improvement project and signal timing revisions can be expected to improve flow, as shown in the LOS forecasts, and result in a reduction of rear-end type, congestion-related accidents.

### 4.5.3 Parking

There is no parking on Orange Street through this corridor. The bridge widening project would not have an effect on existing parking supply, and would not necessarily create any change in parking demand. However, with the proposed pedestrian bridge connecting the central business district (CBD) with the McCormick Park complex, it is conceivable that downtown workers closest to the Park could commute to and park in the parking lot at McCormick Park and walk from there to their CBD employment locations. This would have several advantages including:

- Keeping vehicles out of downtown traffic patterns further reducing VMT.
- Relieving the burden on downtown CBD on-street parking.
- More fully utilizing these existing close-in, but for the most part, unused parking facilities during the normal work week.

The use of this parking facility during the normal work week hours would not adversely impact the McCormick Park activities if an adequate portion of the parking was designated for park use only. It is important to look at maximizing the use of the existing parking facilities that are available before adding additional parking structures or lots. This project will provide a means of accomplishing that very thing and will also encourage people using the Riverfront Trail system to park at McCormick Park rather than the local neighborhood streets and parking areas.

### 4.5.4 Transit

The Mountain Line, operated by the Missoula Urban Transportation District, provides two scheduled, fixed routes which use the Orange Street bridge. Route 7 operates on 30-minute headways in the 7:15 to 9:15 a.m. and 3:15 to 6:10 peak periods, and 60-minute headways during other hours of operation. Route 8 operates all day on 60-minute headways. The system provides signed bus stops at about four-block intervals, but drivers are allowed to stop for passengers at any location on the route where a stop can be safely made.

The proposed Orange Street project would provide a northbound and southbound bus pullout on Orange Street near Cregg Lane, south of the bridge. This would encourage the use of alternate modes of transportation for access to the parks and trail system. The No-build option does not encourage transit use and does not provide locations for safe access to the bus system in this narrow corridor.

### 4.5.5 Traffic Control Plan

There will be some temporary traffic impacts during construction but these will be minimized as much as possible with the development of an acceptable traffic control plan. Two-way traffic will be maintained on Orange Street throughout the new construction except for short periods of time at selected locations. All of the bridge alternatives proposed includes a phase construction to allow for the building of two lanes of the new bridge while traffic is maintained on the existing structure. It is imperative that this corridor **not** be closed for long periods of time due to the large volume of traffic and the detrimental effects that it would have on the community.

The traffic control plan for this project will also be coordinated with the City of Missoula and the Montana Department of Transportation to include possible impacts to other construction activities that they may have operating concurrently with this project. This will ensure the least possible disruption to all of the projects and minimize any impacts to the community.

The No-Build alternative would do nothing to improve safety conditions or traffic operations. As traffic volumes increase on this route, the accident rate will likely increase.

## 4.6 PEDESTRIAN AND BICYCLE IMPACTS - ROAD BRIDGE

Widespread concern was addressed through public comment on the importance of bicycle and pedestrian safety. The "No-Build" alternative does nothing to improve the safety of pedestrians and bicyclists. Instances of solitary bicycle and bicycle/vehicle accidents were documented. There has been one recorded fatality on the bridge which involved a bicyclist being thrown in front of a vehicle when the bicycle pedal struck the existing high curb at the edge of the roadway.

The federal Intermodal Surface Transportation Efficiency Act (ISTEA) which governs highway projects such as this, requires that all modes of transportation be addressed and encouraged during the development of a highway project. The use of non-motorized transportation methods and other multimodal means of transportation are particularly encouraged. By encouraging the use of non-motorized traffic, traffic flow can be improved, vehicle miles traveled reduced and air quality improved. This project is encouraging non-motorized transportation by 1) adding bicycle lanes and sidewalks of sufficient width to provide a safe avenue for both bike commuters and pedestrians; 2) providing a pedestrian/bicycle bridge that will afford trail to trail access to the riverfront trail system and park network in the downtown area.

The project involves numerous improvements to the safety of and enhanced enjoyment for bikes and pedestrians using the road bridge including:

- Designated bike lanes on both sides of the roadway of sufficient width to safely separate commuter bicyclists from vehicles; but yet not hinder the direct flow, alongside the traffic, of bikers using the bridge to commute.
- Bike lanes accessible to street maintenance (e.g. sweepers, snow plows) equipment.
- Proper transitioning of bike lanes on the bridge to the city streets at both ends of the bridge.
- Physical barrier separation of pedestrian sidewalk on each side of the bridge from vehicles and bicyclists.
- ADA considerations and accessibility met or exceeded for crossing the river on the bridge.
- Improved lighting.
- Bicycle/pedestrian access to the Riverfront trails and parks from the river crossing bridge, including those with disabilities. Existing trail facilities along the south side of the river are shown in *Figure 16.*
- Facilities to encourage the use of non-motorized transportation for commuting.

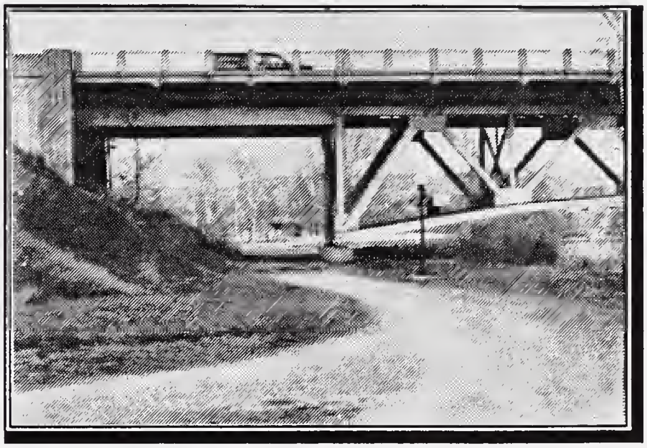


Figure 16. Existing Pedestrian/Bicycle trail under the south end of the Orange Street Bridge.

## 4.7 PEDESTRIAN AND BICYCLE IMPACTS - TRAIL BRIDGE

The trail pedestrian bicycle bridge also enhances safety and functionality for casual/recreational bicyclists and pedestrians (including those with disabilities and children) through features including the following:

- Increased opportunity and encouragement to use non-motorized transportation.
- Downtown loop connection along Riverfront trails at the trail level eliminating the need to use the road bridge for trail to trail connection.
- Openness and lighting of trail bridge.
- ADA considerations and accessibility met or exceeded.
- Better access to Riverfront parks and parking areas.
- Better access to downtown stores, shops and services.
- Casual routing completely away from vehicle traffic.

The bicycle and pedestrian facilities provided by the Orange Street Bridge and Riverfront Access Project are in line with many of the goals of the "Guidelines For Creating a Non-Motorized Travel Network in the Greater Missoula Area (Amendment to the Missoula Urban Comprehensive Plan)" adopted in 1993; otherwise known as the Non-Motorized Transportation Plan (N-MTP).

One of the important aspects of the N-MTP "...is that all non-motorized routes should interconnect...". With the bike lanes and accessible sidewalks on the road bridge, and with the bicycle/pedestrian facilities providing a connecting loop at the riverfront and trails level, this project is congruous with this aspect of the N-MTP.

Further, the N-MTP characterizes the Clark Fork River as"...a major barrier to non-motorized transportation". The N-MTP also states that "... these bridges...(including the Orange Street Bridge)..." need to better accommodate cyclists and pedestrians. With the facilities, safety features and accessibility outlined above, this project considerably improves the Orange Street corridor in line with the N-MTP guidelines for this Preferred Street Network and Trail Core Network. The existing trail facilities on the north side of the river are shown in ***Figure 17***.

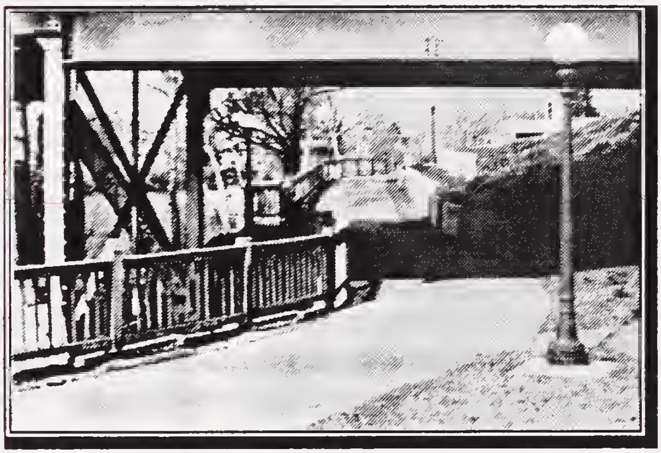


Figure 17. Existing Pedestrian/Bicycle trail under the north end of the Orange Street Bridge.

Proposed project features exceed the N-MTP width guidelines for sidewalks, bridges, bike lanes and for combined traffic/bike travel lanes. With the physical safety barrier, conflicts between bicycles and pedestrians are minimized in the corridor.

The N-MTP specifically addressed a trail bridge in the Orange Street area but does not specify location or design. The Plan does provide guidelines for such a bridge as follows:

> "Any study of a bridge located in this area should encompass i) a preliminary physical design (including an artist's rendering of the bridge in place), ii) preliminary cost and funding estimates, iii) assessment of potential environmental impacts and mitigation methods, iv) a circulation design integrated with the rest of the non-motorized network in this document, and v) a funding/construction timeline."

This project is in line with these guidelines as well as the guidelines of the Downtown Riverfront Plan and the Historic Southside Neighborhood Plan.

No negative impacts to pedestrians and bicyclists from either the proposed road bridge or trail bridge are expected. The No-build option provides only detrimental impacts to bicycles and pedestrians as major improvements are sorely needed in these areas.

### 4.7.1 California Street Trail Bridge

The N-MTP specifically proposes a separate trail bridge crossing of the Clark Fork River at California Street, "using the existing bridge abutments". The plan further states:

> "At-grade river crossings (bank-level to bank-level connections, typically well below the level of street bridges) are an important and popular part of many non-motorized transportation systems. They provide the opportunity for individuals to get away from motor vehicles and get closer to rivers and their unique riparian habitat."
>
> "A bridge at this location has wide community support, offers connections to North Missoula, provides disability access to the south bank for residents of Eagle Watch Estates, integrates well with MRA plans for more trail development on the north bank and acquisition of the former Champion logyard, and would connect to the proposed MRL and Milwaukee Road trails."

This proposed Orange Street project does not in any way remove the need for or the benefits of a California Street crossing. The California Street crossing, as a strictly bicycle/pedestrian facility at that location, is a much needed improvement for the Riverfront Trail System and will aid considerably in the encouragement of non-motorized transportation use in the community. A study was completed on June 16, 1994 to determine the benefits the California Street bridge would have on congestion mitigation and air quality. The construction of the proposed California Street pedestrian/bicycle bridge "clearly exhibits air quality benefits through reductions in total VMT which will likely reduce both CO and PM-10 emissions".

A pedestrian/bicycle crossing at the California Street location would complement the Van Buren Street non-motorized bridge located east of the CBD and provide a loop system in the Riverfront Trails system. The Orange Street project would only continue to enhance that connection with the addition of an another access near the central part of the downtown area, and providing for a loop or figure eight connection in the trail system.

Concerns were voiced about the potential elimination of the California Street Crossing, should the separate bicycle pedestrian bridge near Orange Street be constructed. It is not the intent of this Orange Street project to have any adverse impact on the California Street bridge crossing but rather to complement that crossing by providing additional means of making the trail connections at the riverfront level and further encouraging nonmotorized transportation and reduction in VMT. The need for a river crossing is much greater at the riverfront level at the

California Street location and it is not recommended that this Orange Street project replace such a structure. The City of Missoula is continuing with the programming of the California Street Non-Motorized Bridge Facility as recommended in the recent CMAQ proposal, but it is being considered as a separate project. A copy of the CMAQ proposal for the California Street Non-Motorized Bridge Facility is included in the Appendix 1.

The proposed Orange Street Bridge project would additionally enhance the ability to reduce VMT by providing direct bicycle and pedestrian access to the parks and trail system and encouraging the use of non-motorized modes of transportation. This would in like manner tend to decrease the CO emissions and PM-10 pollutants.

## 4.8 AIR QUALITY IMPACTS

Construction activity for this project will have a temporary adverse air quality impact. However, the contractor will be required to meet all federal, state and local air pollution control standards with regard to dust and fumes. Asphalt plants and gravel crushers will be required to obtain the necessary air quality permits prior to use in order to minimize any impact they may have on air quality. Dust will be controlled by watering or other acceptable methods. Air quality impacts after construction will consist mainly of exhaust emissions from motor vehicles, which will increase on this route as overall traffic volumes increase. Traffic volumes will increase due to natural growth regardless of the new construction. The proposed improvements will provide for a smoother flow of traffic, less delay times, and as a result, a net reduction in the amount of air pollution that will occur in the future.

The Orange Street Bridge project was included in the Missoula Urban Transportation Plan (TP) 1985 Update under recommended improvement No. 16 Orange Street Bridge. This Plan was adopted June 24, 1987 and all improvements included sustaining the federal air quality standards. The recommended improvements in the TP were very general and basically included providing bicycle lanes and improving the Cregg lane access. This project was also included in the Transportation Improvement Program/Annual Element 1993-1997 (TIP) approved on June 24, 1992. It was ranked in this plan as No. 2 Orange Street Bridge under the Surface Transportation Program Urban (STPU). The TIP is now being revised as it is valid for a 2-year period and will probably be completed prior to the end of this year. The Orange Street Bridge remains a part of the new TIP.

The Federal Clean Air Act of 1970 and the most recent Clean Air Act Amendments in 1990 required the adoption of ambient air quality standards. These were established in order to protect public health, safety and welfare from known or anticipated effects of Sulfur dioxide ($SO_2$), Particulates 1-microns and smaller in diameter (PM-10), Carbon monoxide (CO), Nitrogen dioxide ($NO_2$), Ozone ($O_3$) and Lead (Pb). In addition to these pollutants, the State of Montana has established additional criteria for Settled Particulate Matter and Hydrogen sulfide ($H_2S$). The National and Montana Ambient Air Quality Standards (AAQS) for CO and PM-10 pollutants are listed in ***Table 12.***

***Table 12. NATIONAL AND MONTANA AMBIENT AIR QUALITY STANDARDS***

| Pollutant | National Averaging Time | National Standard | Montana Averaging Time | Montana Standard |
|---|---|---|---|---|
| Carbon Monoxide (CO) | One Hour$^{1)}$<br>Eight Hour$^{1)}$ | 35.0 ppm<br>9.0 ppm | One Hour$^{1)}$<br>Eight Hour$^{1)}$ | 23.0 ppm<br>9.0 ppm |
| Particulate Matter (PM-10) | 24-Hour$^{4)}$<br>Annual$^{3)}$ | 150 ug/m$^3$<br>50 ug/m$^3$ | 24-Hour$^{2)}$<br>Expected Annual$^{3)}$ | 150 ug/m$^3$<br>50 ug/m$^3$ |

| | |
|---|---|
| 1) | Not to be exceeded more than once per year. |
| 2) | Not more than one expected exceedance per year. |
| 3) | Not to be exceeded. |
| 4) | Statistically estimated number of days with exceedances is not to be more than one per year. |
| ppm | Part of pollutant per million parts air (by volume at 25°C). |
| ug/m3 | Micrograms of pollutant per cubic meter of air. |

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Sources:
- Code of Federal Regulations, Title 40 Part 50; Amended July, 1987.
- Montana Administrative Code, Title 16, Chapter 8 - Environmental Sciences Division, Subchapter 8; Last amended effective January 31, 1992.

All states are required to submit to the United States Environmental Protection Agency (EPA) a list identifying those air quality control regions, or portions thereof, which meet or exceed the National AAQS or cannot be classified because of insufficient data. Portions of air quality control regions which are shown by monitored data or air quality modeling to exceed the National AAQS for any criteria pollutant are designated "nonattainment" areas for that pollutant.

This proposed project is located in a CO/PM10 "nonattainment" area of Montana for air quality under 40 CFR 81.327, as amended.

The project study area is located within the Missoula Air Quality Control Region (AQCR 144). This region is currently classified as better than national standards for $SO_2$, unclassifiable/attainment for $O_3$, cannot be classified or is better than national standards for $NO_2$, and is not designated for lead. The area is designated as being in moderate nonattainment for both CO and PM-10.

The CO and PM-10 nonattainment designations require that a conformity determination be performed for any major road construction project to show that the net result of the completed project will result in a reduction in CO emissions and PM-10 levels. The original EPA and FHWA conformity determination for this project was completed on August 25 (EPA) and September 9 (FHWA), 1992. There have been no significant changes in the project's design concept or scope from that which was used in the original TIP conformity analysis. The project does conform with the State's Implementation Plan for achieving the National Ambient Air Quality Standards. The regional PM-10 analysis and conformity modeling is now being completed by MDT and should be available by the end of 1995.

The CO levels in the Missoula Valley are largely due to congested traffic in concentrated areas where it cannot move freely without considerable stopping and idling modes. The severity and number of violations of the CO Standard in the Missoula area are contained in the 1990 Base Year Carbon Monoxide Emission Inventory, State of Montana - Missoula County, dated November, 1992. Missoula County has recently begun using oxygenated fuels during the winter months to help reduce the CO levels during the times of highest occurrence. Since December of 1991, there have been no recorded exceedances of either the 1-Hour or 8-Hour CO National or Missoula AAQS.

The PM-10 levels are mostly attributed to residential wood burning, other point sources, use of sanding materials on roads, particulates from motor vehicle exhaust, vehicular tire and brake wear, and re-entrained road dust. The source of violations and the strategies of the State and local air quality officials to bring the Missoula area into PM-10 attainment are contained in the Missoula County Air Quality Control Program dated January 24, 1992 with subsequent amendments, which is part of the State of Montana Air Quality Control Implementation Plan. The plan was approved on December 11, 1992 by the EPA.

The City of Missoula has also begun applying liquid de-icers on the streets, rather than using sanding materials, and has acquired additional new generation street sweeping equipment that is equipped with bag houses to more effectively collect the particulate during winter sweeping operations. These methods will also be applied to this project to conform with the Implementation Plan. The addition of this project to the Missoula Valley will have a positive effect in the reduction of CO emissions, with the potential to reduce PM-10 particulate levels as well.

This project conforms to the current Air Quality Control Plan and the transportation control strategies that are recommended in the Plan will be implemented on this project. The proposed bridge improvement project will allow more efficient use of traffic signals in the bridge vicinity by eliminating the traffic lane imbalance caused by a two-lane bridge on the 4-5 lane arterial. Projected intersection level-of-service shows a decrease in intersection delay compared to the no-build alternative and a decreased likelihood of traffic diversion to alternate routes. The proposed bridge project will be evaluated in the updated city-wide traffic model when the calibrated model is available in 1995. By providing a continuous major corridor through the urban area which will provide convenient access to the urban center, the likelihood of diversion of larger trucks and transportation vehicles through the residential sections will be reduced, which will in turn relieve the congestion to other vehicles on the local streets. This has the potential of reducing the PM-10 levels by reducing the number of trips and therefore the amount of turbulence caused by these larger trucks on the secondary roadways where the street cleaning is not as complete. The addition of right and left turn lanes will assist in shortening the stop time required along the new route.

### 4.8.1 Air Quality Modeling and Analysis - Roadway Bridge

A microscale (intersection) air quality analysis was completed for this project due to the small boundary that defined the project. Air quality modeling receptors were defined in accordance with the EPA's "Guideline for Modeling Carbon Monoxide from Roadway Intersections" (EPA-454/R-92-005) (See Appendix 1 for receptor maps). These receptors were used to determine the peak hour and eight hour maximum carbon monoxide concentrations at the intersections of Orange Street with West Broadway, Front/Main and South 3rd.

Two EPA-approved computer models, MOBILE5a and CAL3QHC 2.0, were used to analyze the emission and dispersion of CO in the vicinity of the intersections. MOBILE5a calculates CO emission rates using several variables, including vehicle travel speed, year of analysis, and temperature. CAL3QHC predicts non-reactive pollutant concentrations, including CO, in the vicinity of signalized intersections. Variables used in CAL3QHC include intersection geometry and signalization, traffic volumes, emission rates from MOBILE5a, and meteorological data.

The results of the air quality analysis are presented in ***Tables 13 and 14***. Both the Build and No-Build CO concentrations are lower than the existing (1993) levels. This is because the MOBILE5a program considers that CO concentrations will decrease over time with the phasing-out of older, more-polluting vehicles, and with improvements in vehicular emissions control technology.

*It is important to recognize that the figures presented in the following tables reflect a model condition and not the actual emissions that occur at these sites. The baseline information is established according to EPA requirements and reflects the potential comparative change from present to future conditions. The numbers shown are considered to be very conservative and are much higher than the readings that have been recorded at these sites. The comparative values of the charts, however, are representative of the changed conditions that would occur with a build or no-build proposal.*

*Table 13. PEAK HOUR MAXIMUM CARBON MONOXIDE CONCENTRATIONS (ppm)*

| Orange Street Intersection | 1993 | 1998 | | 2015 | |
|---|---|---|---|---|---|
| | | Build | No-Build | Build | No-Build |
| Broadway | 23.9[1] | 16.5 | 19.3 | 12.7 | 14.1 |
| Front/Main | 26.3[1] | 17.1 | 21.6 | 11.9 | 15.4 |
| South 3rd | 15.5 | 13.1 | 13.9 | 9.7 | 10.3 |

Peak hour background CO concentrations used were as follows: 2.7 ppm (1993), 2.4 ppm (1998) and 2.2 ppm (2015).

1) Exceedance of the Montana Ambient Air Quality Standard of 23.0 ppm for Carbon monoxide, one-hour average, not to be exceeded more than once per year. National Standard is 35.0 ppm, one-hour average.

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Source: HNTB, October, 1994

*Table 13* shows the highest peak hour CO concentrations, in parts per million (ppm), modeled at each of the three intersections. The results show no present or future exceedance of the 1-Hour National AAQS for CO. However, an exceedance of the 1-Hour Missoula AAQS for CO is indicated in the existing (1993) year. The resulting concentrations indicate a significant reduction in CO levels in the vicinity of the three intersections with implementation of the project.

*Table 14. EIGHT HOUR MAXIMUM CARBON MONOXIDE CONCENTRATIONS (ppm)*

| Orange Street Intersection | 1993 | 1998 | | 2015 | |
|---|---|---|---|---|---|
| | | Build | No-Build | Build | No-Build |
| Broadway | 20.1[1] | 13.9[1] | 16.2[1] | 10.7[1] | 11.8[1] |
| Front/Main | 22.1[1] | 14.4[1] | 18.1[1] | 10.0[1] | 12.9[1] |
| South 3rd | 13.0[1] | 11.0[1] | 11.7[1] | 8.1 | 8.7 |

1) Exceedance of the National and Montana Ambient Air Quality Standard of 9.0 ppm for Carbon monoxide, eight-hour average, not to be exceeded more than once per year.

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Source: HNTB, October, 1994

*Table 14* presents the maximum eight hour CO concentrations using a persistence factor of 0.84. The results indicate exceedances of the 8-Hour NAAQS either with or without the project. However, based on the analysis, CO concentrations would decrease by as much as 20.8% in 1998, and 22.7% in 2015 with the proposed project.

The persistence factor is the ratio of the 8-hour to the 1-hour CO concentration estimate, and is intended as a measure of the variability in traffic volumes and meteorological conditions over an eight-hour period. The calculated persistence factor of 0.84 is significantly higher than the EPA default of 0.70. After discussion with the Montana Department of Health and Environmental Sciences and the EPA Region VIII office it was recommended that the EPA default PF of 0.7 be used for Missoula.

This project is programmed into MDT's air quality regional analysis which is not yet complete. This analysis should be completed by August 1996 as part of the Transportation Plan Update and will provide the information necessary to make a final determination regarding air quality improvements.

The No-Build alternative would have no long term beneficial air quality impact other than the improved air emissions from newer vehicles and would not aid in the reduction of the CO emissions to the extent shown by the proposed project. It would, however, eliminate the short term adverse impact due to construction activity.

### 4.8.2 Non-Motorized Bridge

On June 16, 1994 a CMAQ proposal was completed for the California Street Non-Motorized Bridge Facility showing the benefits of this separate bicycle/pedestrian crossing to air quality. A copy of this proposal is included in Appendix 1. This proposal outlined the daily Vehicle Miles Travelled (VMT) and emissions reductions that could be expected by the construction of this facility. It was shown that by providing access to the west portion of the Missoula downtown area and connecting the trails system with the Van Buren Street footbridge near the University of Montana on the east end of the community, a decrease in both CO and PM-10 pollutant emissions could be expected.

Based on this data and the precepts upon which the calculations were made, the addition of a separate bicycle/pedestrian bridge downstream of the Orange Street Bridge would have a similar though potential lesser effect on the pollutant emissions. Due to the connection with the parks, riverfront trail system, existing and proposed pedestrian/bicycle bridges, central business district and the University of Montana that this additional facility would provide, it would also provide air quality benefits for this area of the community by reducing the VMT.

Using the Air Quality Benefit Calculations determined for the California Street Non-motorized Bridge as a basis of comparison, it is estimated that the proposed separate bicycle/pedestrian bridge at the Orange Street Bridge location would result in approximately one-fourth the number of projected commuter trips shown for the California Street bridge. The utilitarian trips, however, are estimated to be twice as high on the Orange Street pedestrian/bicycle bridge due to its close proximity to the parks, trails and accessibility to the downtown area. Using the figures derived in the California Street bridge calculations, the Orange Street pedestrian/bicycle bridge is estimated to result in 5 new commuter non-motorized trips and 68 new non-motorized utilitarian trips per day. This would reduce the VMT by 86 km (54 miles) per day or 24,192 VKT (15,120 VMT) per year. The change in emissions as a result of this reduction would be 683 kilograms (1503 lbs) less CO emissions per year and 1.96 kilograms (4.3 lbs) of PM-10 prevented each year. This is approximately 70% of the reduction that was shown by the California Street bridge. This would be an improvement to air quality. See the Appendix 1 for more detailed calculations.

A No-build option would not encourage increased non-motorized transportation use and would not reduce the VMT through this corridor. The air quality would not be improved as much with a No-build alternative.

## 4.9 NOISE IMPACTS

Traffic volumes along Orange Street will continue to increase at approximately the same rate with or without the proposed construction. The main area of concern with regard to noise impacts is the Clark Fork Riverside Retirement Center complex as it houses a large number of people in close proximity to the roadway. The proposed widening would bring the traffic approximately 6 meters (20 feet) closer to this building and would therefore increase the noise levels. The other sections of the roadway are primarily bounded by the river corridor and the municipal parks. Lowering the road grade will have a slight effect on the traffic noise within the parks area but will not create any adverse impacts.

The Federal Highway Administration (23 CFR 772) defines noise impacts as occurring when the future traffic noise levels substantially exceed the existing noise levels, or when the Noise Abatement Criteria (NAC) is approached or exceeded. The NAC for Category B which includes schools, residences, churches, and public meeting facilities is Leq(h) = 67 dBA and for Category C sites which include developed lands or properties (such as the area north of the river along Orange Street) is Leq(h) = 72 dBA.

| | |
|---|---|
| Leq - | the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as a time-varying sound level during the same period. |
| Leq(h) - | the hourly value of Leq |
| Traffic Noise Impacts - | impacts which occur when the predicted traffic noise levels approach or exceed the noise abatement criteria, or when the predicted traffic noise levels substantially exceed the existing noise levels. |

Montana defines "approached" as one decibel (1 dBA) less than the NAC for any Category, i.e. 66 dBA would be "approaching" 67 dBA, the NAC for Category B; or 71 dBA would be "approaching" 72 dBA, the NAC for Category C.

Montana defines "substantially exceed" as ten decibels (10 dBA) or greater than the existing noise level.

A simplified noise prediction method utilizing nomographs based on the FHWA Noise Prediction Model was employed to evaluate noise impacts. A comparison of current and design year traffic volumes, travel speeds, and vehicle mixes was made to determine if the NAC would be exceeded for the land uses in the project area. The existing land uses near the project are mainly residential, parks and commercial.

The noise analysis assumed a hard site for the commercial and residential property north of the river and a soft site for the parks and residential area south of the river. The travel speeds varying from 48 to 64 kilometers per hour (30 to 40 miles per hour). The Clark Fork Riverside Retirement Center is currently 33± meters (110± feet) from Orange Street. The proposed project would move the roadway approximately 6 meters (20 feet) closer to the building.

Current and future noise levels for the traffic volumes are predicted as follows at the Clark Fork Riverside Retirement Center north of the river: (Hard Site) (Category C Site)

| | Year 1993 | Year 2015 |
|---|---|---|
| Heavy Trucks | 67 dBA | 69 dBA |
| Medium Trucks | 65 dBA | 67 dBA |
| Autos | 62 dBA | 64 dBA |

These levels are below and do not "approach" the NAC level of 72 for Category C sites. The proposed project will increase the noise levels by approximately 2 dBA which is not a significant change from the existing condition.

The area to the south of the river consists of parks and residential and would be classed as a Category B site. The closest building (assuming the two houses at the corner of 1st and Orange are relocated) is approximately 21 meters (70 feet) from the existing roadway. This would not change as a result of this project. The current and future noise levels for this site are predicted as follows: (Soft Site) (Category B Site)

| | Year 1993 | Year 2015 |
|---|---|---|
| Heavy Trucks | 67 dBA | 68 dBA |
| Medium Trucks | 65 dBA | 66 dBA |
| Autos | 62 dBA | 63 dBA |

These levels are near the NAC level of 67 dBA for the autos and trucks while the heavy trucks are currently at the designated NAC level. The proposed project will increase these levels by approximately 1 dBA at this location. This is an insignificant increase over the existing levels. Due to the high existing levels it is recommended that design measures be considered to aid in the reduction of the noise levels.

The noise calculations for current and estimated traffic conditions indicate that the NAC for Category C land uses will not be exceeded and therefore this project will not have an adverse impact on the existing and future developments. The traffic conditions for Category B land use are currently at the recommended limits and the projected increase is negligible. The projected noise level increases over existing levels for either location will be less than substantial (10 dBA or more). There will essentially be no change in the noise impacts from the proposed project than currently exists.

Traffic noise levels by the year 2015, based on projected traffic volume increases, will not be significantly different for the "No-Build" alternative as for the proposed construction project.

## 4.10 HISTORICAL/CULTURAL IMPACTS

In order to provide the cultural resource information to meet federal and state historic preservation legislation a Class III cultural resource inventory was conducted over the area of potential effect. All lands along the route are privately owned or owned by the City. Approximately 5.3 ha (13 acres) were inventoried, an area 427 m (1400 ft) in length and 122 m (400 ft) wide. Additionally lands where a proposed bicycle/pedestrian access bridge is proposed were examined for prehistoric and historic cultural resources. Cultural resource inventory and evaluation was done in consultation with the City of Missoula; Montana Department of Transportation (MDT); State Historic Preservation Office (SHPO) and the Missoula Historic Preservation Office.

The deck truss Orange Street Bridge was completed in 1937. It was not recorded nor evaluated because of a 1989 Programmatic Memorandum of Agreement (PMOA) on bridges in Montana between the MDT, SHPO, Federal Highway Administration and Advisory Council on Historic Preservation. Under this PMOA a determination of eligibility is not needed at this time. On the south end of the Orange Street Bridge is an overpass built over the tracks of the Chicago, Milwaukee, St. Paul and Pacific Railroad (CM St. P & P RR). This overpass also falls under the jurisdiction of the bridge PMOA.

Crossing under the bridge on the south side of the river are three linear historic sites: the abandoned railbed and overpass of the CM St. P & P RR which is now a bike path and part of the Missoula Riverfront Park; the Dinsmore Orchard Homes Ditch (24MO545); and the

Missoula Irrigation Ditch (24MO544). The CM St. P & P RR railroad bed has been determined eligible to the NRHP but was not recorded on this project because it has been dealt with previously under another PMOA. The two irrigation ditches were recorded but not evaluated because they are also covered under a PMOA.

Buildings on the north side of the river are of recent construction but some of the structures on the south side of the river are historic. On the south side of the river east of Orange Street is the Missoula Southside Historic District, a 20 block area from the river to South 6th Street West between Higgins and Orange Street. This historic district retains "a high degree of historic architectural integrity" (Barton 1991) and the draft Historic Southside Neighborhood Plan emphasizes the significant role of historic buildings in the overall planning process. Of significance to the Orange Street Bridge project is that the boundaries of the historic district do not include the structures fronting Orange Street and within this project area. There are two residences on the west side of Orange Street (502 S. 1st St. W and 203 W. Orange Street) which are within an area proposed as the McCormick Park Historic Residential District. These two structures will both be contributing to such an historic district but will not be affected by this project. A letter received from SHPO dated January 3, 1995 concurs with the eligibility designations of the properties included in this project and it is included in Appendix 1.

| Site Name/ Address | Type of Site | Description | NRHP Elig. | Within Southside Hist. Dist. |
|---|---|---|---|---|
| 502 S. 1st St. W Chaffin House (24MO532) | Residence | Free classic Queen Anne style residence owned by Thomas Chaffin and built ca. 1905 | Yes, under C | No |
| 203 S. Orange St. Fisher House (24MO533) | Residence | Queen Anne style house built ca. 1900 by Will P. Fisher, local entrepreneur | Yes, under C | No |
| Orange St. Bridge | Bridge | Deck truss built by WPA in 1937 | NA; under bridge PMOA | No |
| C M St. P & P (24MO164) | Railroad bed & overpass | Constructed through Missoula in 1906; recorded under MOA with the MDT | NA; under bridge PMOA | No |
| 438 S. 1st St. W Lee Residence | Residence | Wood frame vernacular house with hip & gable roof; built ca. 1909; remodeled; in project corridor but fronts S. 1st | House not eligible, garage is | Within but non-contributing |

| | | | | |
|---|---|---|---|---|
| 201 Chestnut | Residence | One story pyramidal roofed Folk Victorian; built 1910; outside project corridor, rear of property faces Orange St. | Yes, and assoc. shed is contributing | Within, primary element |
| 205 Chestnut | Residence | One story I-shaped brick Folk Victorian; built 1910; outside project corridor, rear of property faces Orange St; 1950's vintage shed separates house from Orange St. | Yes, assoc. shed non-contributing | Within, primary contributing element |
| 207 Chestnut | Residence | One story I-shaped brick Folk Victorian; built 1910; outside project corridor, rear of property faces Orange St. | Yes, and assoc. shed is contributing | Within, primary contributing element |
| 209 Chestnut | Residence | One story pyramidal roofed Folk Victorian; built 1910; outside project corridor, rear of property faces Orange St. | Yes | Yes, contribting |

The Orange Street Bridge. The Orange Street Bridge (called at first Harris Bridge and then Parkway Bridge) was built from July of 1936 to July of 1937. It did not replace an earlier bridge; rather it supplemented existing river crossings, including the Harris Avenue and the California Street Bridges. The Orange Street Bridge was formally dedicated on July 16, 1937. It was christened the Parkway Bridge, a name submitted by Edna Tingley of Missoula as part of a contest sponsored by the Missoula Active Club ("Span Dedicated," 1937). The Parkway Bridge was built as a Works Progress Administration project (WPA). *Figure 18* shows the existing Orange Street bridge.

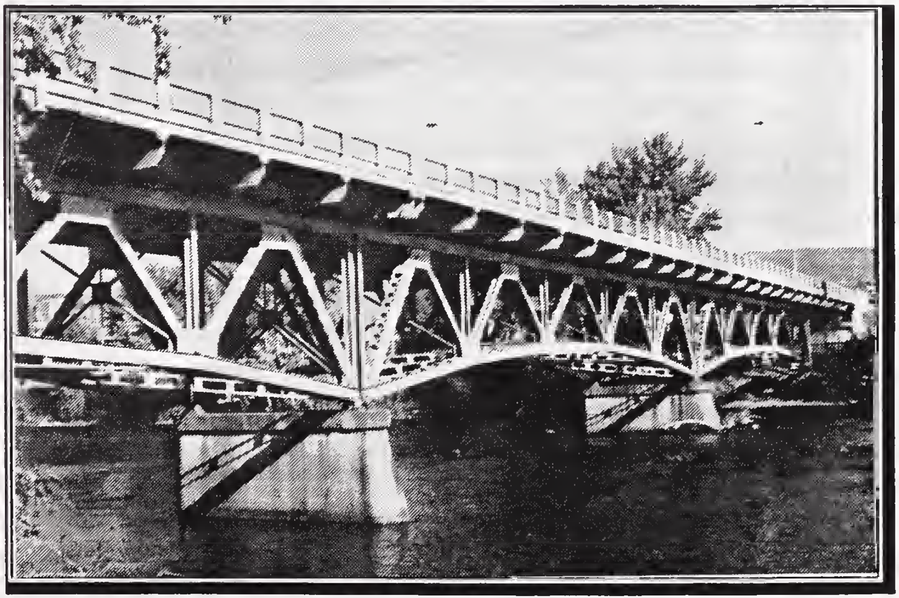


Figure 18. Existing Orange Street Bridge looking north.

The Flathead and the Kootenai Culture Committees have indicated that they have no specific concerns about the proposed project area.Although the area is so disturbed from historic development and archaeological sites were not expected to be encountered by the inventory, there is some information regarding potential sites. Several prehistoric sites are known to have been within the city limits. Of concern are Native American burial sites, one of which was reported near the Safeway store several blocks off the project area. Carling Malouf (1994) recommends that particular care be taken when digging into the river terraces to create approaches for the new and/or enlarged bridge. It was also mentioned that there is "unusual stonework" on the north side of the Milwaukee overpass that is now buried underneath waste concrete and dirt used as fill for Cregg Lane.

Six historic residential properties and no prehistoric or archaeological materials were recorded within the inventory corridor. None of the historic residential properties will be affected by the proposed actions and therefore there will be no adverse impacts to the cultural/historic resources of the area. In a letter dated February 28, 1995, SHPO concurred that there will be No Effect on site 24MO533, the Fisher House and No Adverse Effect on site 24MO532, the Chaffin House and the Missoula South Side Historic District. The Advisory Council on Historic Preservation has agreed with this concurrence in a letter dated March 13, 1995. These letters are included in Appendix 1.

The No-build alternative would have no direct impacts on the historical/cultural sites in the area.

## 4.11 WATER QUALITY IMPACTS

All surface water along the project boundary generally drains to the Clark Fork River. No significant water quality impacts are anticipated as a result of the proposed action. Some short term construction related water quality impacts may occur. These will be minor impacts and will be minimized through construction requirements in the contract and by conformance to the MDT Standard Specifications and adherence to the requirements of the Water Quality Division of the Montana Department of Environmental Quality and local regulations. Existing drainages and flow patterns will be maintained and perpetuated.

Highway projects involving point source discharges during construction are subject to the permit requirements of the Montana Pollutant Discharge Elimination System (MPDES). The permit establishes allowable limits on turbidity and other pollutants generated by construction activities. The permittee must also monitor water quality and provide results of such testing.

A point source discharge permit will be obtained by the contractor from the State of Montana Water Quality Division, Department of Health and Environmental Sciences for dewatering activities. Any other construction activities which are not generally considered as point source discharges and do not require a permit, must also receive authorization for temporary increases in turbidity. Construction activities around waterways will also be controlled through requirements in the contract.

Coordination with the U.S. Fish and Wildlife Service (USFWS) will be made for the Clark Fork River crossing as it includes fish passage.

All highway construction activities subject to Section 404 of the Clean Water Act will be identified and the appropriate type of permit (Individual, Nationwide, Regional, or General) necessary for the type of construction will be obtained. This proposed project will be in compliance with the provisions of both Water Quality under 75-5-401(2) M.C.A. for Section 3(A) authorizations, and Stream Protection under 87-5-501 through 509 M.C.A., inclusive. See Section 4.23 for additional information on necessary permits for this project.

In addition to these permits, the construction specifications will require that the contractor submit plans for proposed work bridges, haul bridges or other temporary construction facilities; or for any modifications to the approved plans to the Engineer for transmittal to and approval from the State of Montana, Department of Fish, Wildlife, and Parks.

Construction requirements detailed in the specifications will also require the use of cofferdams, as needed, and restrictions on dewatering, excavation, and backfilling to minimize impacts within the streams and adjacent stream banks. It is anticipated that no material will be placed below ordinary high water elevations during the construction. The Contractor will be responsible for compliance with all applicable water pollution and sediment control laws, rules and regulations. All disturbed areas will be reseeded and temporary erosion control measures used in accordance with the Montana Department of Transportation Standard Specifications.

There will be no adverse affects to Water Quality due to the construction of this project.

## 4.12 FLOODPLAIN IMPACTS

Appropriate flood boundary and flood plain maps, along with the topographic maps for the project area have been reviewed. A Floodplain delineated under Federal Emergency Management Administration (FEMA) criteria along the Clark Fork River is encroached by this proposed project. Missoula County administers this floodplain for FEMA, and a Floodplain Development Permit will be required for this encroachment. The existing floodplain elevation is approximately 968.4 m (3177 feet) and basically follows just below the top of the existing river bank on each side. The proposed fill for the approaches to the bridge will not encroach any further on the river floodplain than the existing fills. The fills themselves will be widened for the wider roadway section but the river opening will remain the same. The existing fills are all outside of the designate floodplain.

By using fewer piers as proposed in the new alternatives, the hydraulics of the river will be improved and the floodplain elevation will not be raised. The new piers for the bridge will be designed to maximize the flood hydraulics as well as minimizing the impacts to the river system. The floodplain will therefore not be affected by the proposed improvements. The Pedestrian/Bicycle bridge and Road bridge will be designed to allow for adequate clearance of the 100-year flood plus the necessary clearance for the Search and Rescue boat that is located at McCormick park.

The floodplain encroachments from this proposed project occur from bridge end to bridge end for both the roadway bridge and the separate pedestrian bridge. This proposed project will not promote or encourage development within this delineated floodplain, nor increase flood liability hazards from its construction. This proposed project is therefore considered to be in complianced with Executive Order #11988.

## 4.13 VEGETATION

Vegetation data was collected by Natural Resource Services from observations made during a field reconnaissance to the project area in May 1994, literature sources, and local agency and citizen contacts.

Four vegetative groupings and two landtypes were identified and mapped. Most of the study area has been modified by human activities to varying degrees. Plant species present include a variety of native, introduced, and weedy grasses and forbs. Intact native plant communities in the traditional sense are very limited in area, so no attempt was made to utilize recognized classification systems. Dominant and subdominant plant species were noted and other pertinent features were described.

Vegetation disturbances would be confined to the R/W including permitted construction areas. Overall vegetation losses would not be significant because the amount that would be lost is very small relative to the availability of surrounding similar vegetative groups.

Mitigation measures that will be used to minimize impacts include minimal disturbance or removal of vegetation during construction and reclamation or landscaping to ensure that desirable vegetation returns.

Noxious weed spread is always a concern when ground is disturbed. Spotted knapweed is well established in much of the surrounding area and along the trails. Canada thistle is also present in much of the river corridor. Leafy spurge is also very prominent on the hillsides surrounding the Missoula Valley. It is likely that a seed source for other weeds exists in the project vicinity that would be available to invade disturbed areas. The MDT would, as is standard policy, work with the Missoula City/County Weed District to address noxious weed control and prevention. Landscaping is a useful tool in noxious weed management to eliminate weed infestations or to control re-invasion. Weed control objectives and methods would be incorporated into the overall landscaping goals for the project. The design will also include the revegetation of all disturbed slopes so that they will match the native plant species and blend with the surrounding parks.

## 4.14 FARMLAND IMPACTS

Pursuant to P.L. 95-87, the USDA Soil Conservation Service has been directed to identify and inventory the extent and location of important rural lands needed to produce food, feed, fiber,forage, and oilseed crops (7 CFR 657). Based on the SCS inventory, the proposed project will not affect any prime or unique farmlands. All existing irrigation facilitities will be perpetuated as necessary. ***Figure 19*** shows one of the existing irrigation ditches under the south approach to the Orange Street bridge.

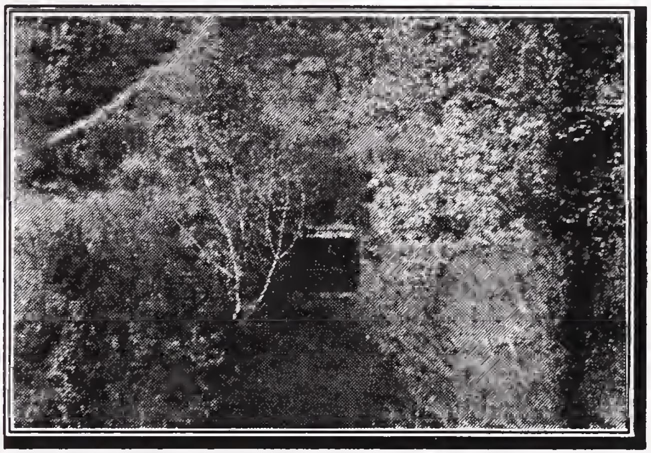


Figure 19. Existing Dinsmore Irrigation Ditch under the south approach for the Orange Street Bridge.

## 4.15 WETLAND IMPACTS

Wetlands are unique ecosystems that provide diverse and specialized habitats for wildlife. They are typically limited in extent but are often extremely important for a variety of plant and animal species. Wetlands are also integral buffers between terrestrial and aquatic ecosystems.

Wetland evaluations were conducted to specifically address wetland resources in the project area as mandated by Executive Order 11990, federal and state statutes, and federal regulations. Guidance for the completion of these studies is provided by the Interagency Wetlands Group Memorandum of Understanding (1989) and Instruction Guidelines for Consultant Projects dated 10-23-91. The US Corps of Engineers 1987 wetland delineation method was the specific wetland delineation procedure used (Environmental Laboratory 1987). The wetlands evaluation was completed by Natural Resource Services, in the Biological Resources Report, 1994 and is available for review at the City Engineering Department.

The wetland and biological resource information was evaluated from existing databases and on-site field examinations in the project area on terrestrial, aquatic, riparian and biological resources, including threatened and endangered species (TES) and rare and sensitive species.

In 1962 the north channel near the Wilma Building was filled in during a Bureau of Reclamation project for flood control. This site eventually became Caras Park. Other flood control measures conducted by the Bureau of Reclamation included: levee construction, riprapping and channel diversion, which influenced riverbank areas in the project.

Landform types, vegetation and soils found in the project area are primarily the result of man-made flood control structures and natural disturbances from a history of floods. The project area basically lacks having sufficient hydrophytic vegetation and hydric soils to be classed as wetland sites.

It was concluded that the project area along the Clark Fork River is a Riverine/Riparian ecosystem. No wetlands were identified, therefore there will be no impacts to wetlands resulting from construction of the proposed project.

## 4.16 FISH AND WILDLIFE IMPACTS

### 4.16.1 Fisheries

Fisheries and aquatic resource data was obtained from current database sources (Montana Department of Fish, Wildlife and Parks (MDFWP) and Montana Rivers Information System) and from interviews with fishery biologists of the MDFWP at the Missoula District Office.

There is a potential to adversely affect spawning sites of two sensitive trout species - Westslope Cutthroat Trout and Bull Trout. Sedimentation and disturbance of aquatic (fishery) habitat would be associated with construction activities such as piering, excavation, dredging and bank grading.

Alternative R3 would have minimal impact to aquatic resources, specifically to two sensitive trout species as it would have the least amount of pier construction.

Alternatives R1 and R2 can be implemented, provided certain mitigation measures are applied. These include: proper design of bridge piers in relation to stream characteristics, i.e., water depth, flow (velocity and direction) and bottom characteristics - gravelly bottom (prime spawning material), boulders, rubble, silt, sand, clay. Equipment working in river should be rubber tired and silt fences should be between banks and water edge during bank construction.

### 4.16.2 Wildlife

Wildlife and habitat use data was obtained from Natural Resource Services observations and literature review (current inventories and investigations) of wildlife species occurrences along the Clark Fork River ecosystem near the project area. Additional information was obtained from recorded field observations of a local wildlife observer, Will Kerling.

During the field reconnaissance, very few wildlife species (or their sign) were seen on or adjacent to the project area.

Due to the urban environment in which the project is located, there are only occasional sightings of certain big game species, such as whitetailed deer and mule deer, in the vicinity of the Orange Street Bridge. Other big game species, such as moose, bighorn sheep, black bear and mountain lion, are not habitants of the project area. These mammals have been observed in the Clark Fork River corridor, but only on the periphery of or remote from the Missoula area.

Upland bird species (i.e. grouse, pheasant) common to local forest or grassland ecosystems are not found in the vicinity of the project area. This is attributed to the lack of suitable and natural habitat necessary for security cover and food requirements. The influence of urban development precludes the occurrence of these species.

A variety of raptors are common residents and migrants along the Clark Fork River ecosystem depending upon the seaon. The bald eagle, the only threatened and endangered species in the project area, has been observed as a migrant and winter resident in the river corridor. The only other raptor observed to date in the vicinity of the Orange Street Bridge was the sharp-shinned hawk (Will Kerling).

Furbearer species occurring along the Clark Fork River near Missoula includes: beaver, mink and muskrat. There is evidence of beaver activity along the river banks near the Orange Street Bridge where several trees have been felled. Raccoon are reported as occasional visitors in the vicinity of the project.

Non-game species, birds, small mammals, amphibians and reptiles do occur in riparian habitats near the project area.

Impacts to the wildlife species and their habitats would be apparent during construction and reclamation activities. All impacts to wildlife due to bridge construction are estimated to be minor and short term. Suitable wildlife habitat is lacking within the project corridor resulting in a low incidence of wildlife use. The most significant impacts would be temporary affects on bird nesting and small mammal sites when vegetative cover (tree, shrubs, grasses) is removed during construction. There are not expected to be any long-term negative impacts or any irretrievable loss to wildlife or habitat associated with this project.

It is expected that well designed mitigation measures such as landscaping (planting and seeding) will offset affects on vegetative cover types.

Measures that could be implemented to mitigate potential impacts are primarily related to construction and maintenance operations. Disturbances to native plant communities will be kept to a minimum. Unnecessary disturbance beyond the construction zone will be avoided in order to prevent weed invasion and removal of native and other desirable vegetation. Reclamation of disturbed areas will proceed as construction is completed in that area.

Depending upon the magnitude of construction activities, the best selection for the Roadway Bridge is Alternative R3 in order to avoid or minimize adverse affects on biological aquatic resources. Alternatives R1 and R2 would require a careful, well-planned design of pier construction and location in regards to rivers flow, depth and bottom characteristics.

The preferable alternative from a wildlife standpoint for the pedestrian/bicycle bridge is Alternative PB1 with attached bridge underneath (alongside) the road bridge. This alternative would cause the least impact on the aquatic, biological, terrestrial and wetland resources. Alternative PB2 would have the next least impacts with Alternative PB3 having the most impact to the area wildlife. Both PB2 and PB3 would require proper pier design and construction to minimize impact.

## 4.17 RARE AND SENSITIVE SPECIES

Species discussed in this section are designated as rare, sensitive, or as species of concern by the Montana Natural Heritage Program or by the Montana Department of Fish, Wildlife and Parks (MDFWP). Species so designated are not all considered to be threatened or endangered species, as listed by the U.S. Fish and Wildlife Service (USFWS), although some are and some of them may be considered as candidates for listing as threatened or endangered.

### 4.17.1 Terrestrial Resources

Wildlife species considered to be of special interest or concern based on limited species numbers and/or habitat in Montana, and for which elimination from Montana could be a significant loss to the gene pool of the species are listed by the MDFWP (1986). This designation does not have any legal implications but does indicate MDFWP concern for the species.

In Missoula County there are eight species of mammals known or suspected to occur. The mammal species are fringed bat, california bat, big-eared bat, hoary marmot, grizzly bear, fisher, wolverine, and lynx . No wildlife species with a rare and sensitive status are known or observed in or near the project area.

A variety of birds and small and large mammals that have been observed in the Clark Fork River ecosystem within or near the project area are listed in Appendix 1. A few songbird species could be year round residents near the project area based on habitat requirements of tree/shrub cover types found along the river banks and recreational park area.

No terrestrial wildlife species with a rare and sensitive status are known or observed in the project area.

Impacts associated with construction activities on the Orange Street Road Bridge and Pedestrian/Bicycle Bridge would be minor and short term. Affects on bird nesting sites and vertebrate habitat would be apparent when mature overstory trees and understory vegetation are removed during construction activities. These impacts are not considered adverse because of the small amount of disturbance that will occur and well designed mitigation measures (landscaping) that can offset temporary losses of wildlife habitat.

Recommended mitigation measures to restore any losses to bird nesting or vertebrate habitat will include the following:

- Avoid removing large, mature cottonwood trees during construction, if possible.
- Schedule construction activities around nesting periods of birds currently in the area.
- Reclaim and restore disturbed sites by revegetation methods (reseeding and planting) of native species on well designed landscape plan.
- Erosion and weed control by cultural methods (reseeding, topsoiling, mulching and matting techniques).
- Alternatives R2 and R3 would have the least impact because of less construction due to the lowered road grades.
- Alternative R1 would require additional construction equating to potentially more impact on wildlife habitat because of the additional fill width required due to the higher elevation.
- Alternative PB1 would have the least impact with the bridge attached underneath or alongside present road bridge.

- Alternatives PB2 and PB3 would have minor to moderate impact on riverbank terrestrial vegetation either upstream or downstream.

### 4.17.2 Aquatic Resources

Westslope Cutthroat Trout, Bull Trout and Brown Trout make up about 5 percent of trout in the Clark Fork river system (MDFWP person. commun., 1994).

Westslope Cutthroat Trout and Bull Trout are listed as sensitive species (MNHP, 1994).

Potential impacts associated with bridge construction include excessive sedimentation, degradation or removal of aquatic habitat and alteration of stream flow. These impacts singly or combined could affect valuable trout spawning sites and reduce macrophyte populations living in running water biotypes.

No impact is expected to aquatic resources from the construction or attachment of a pedestrian/bicycle bridge to the present Orange Street Bridge. Impacts would be slight and short term if a separate bridge is built below the island or end of trail on the north side downstream.

There is no impact expected on aquatic resources of the two irrigation ditches from removal of the railroad underpass. This is attributed to the lack of aquatic functions and values in the ditches.

Proper design of new pier construction is considered a priority item in minimizing sedimentation and degradation of aquatic habitat.

### 4.17.3 Plant Species and Habitats

Identifying plant species that are rare or potentially rare and evaluating the potential for extinction and how this issue relates to the diversity of life is an on-going process that has gained much public awareness over the last decade. The US Fish and Wildlife Service (USFWS) has federal authority through the Endangered Species Act to list plants as threatened, endangered or as candidates for threatened or endangered status. Currently, there are no plant species in Montana that are listed as threatened or endangered, although 19 are candidates for listing. A number of public agencies, such as the US Forest Service, and private organizations, such as the Nature Conservancy through the establishment of the state level Natural Heritage Programs, have helped in this effort to identify rare plant (as well as animal) species. The Montana Natural Heritage Program (MNHP) functions as a clearinghouse for information on rare species and habitats for the state.

There are an estimated 44 plant species of special concern listed for Missoula County, but there are only two species known in the general area near the proposed project. These include:

Obscure Evening-Primrose (Camissonia andina) and
Missoula Phlox (Phlox Kelseyi var missoulensis)

These species of sensitive plants were not found within the project area following a field survey.

The landform and vegetation in the project area is primarily the result of previous reclamation and landscaping projects done in earlier years. A species list of Flora found in the project area is shown in Appendix 1.

An admixture of vegetation consisting of exotic trees/shrubs/understory grasses with remnants of native species comprises the dominant terrestrial cover types. Alteration of river banks for flood control has restricted native vegetation (i.e., trees) to scattered stringers at the base of riprapped rocky banks.

Natural, undisturbed vegetation on terrestrial sites is mostly limited to an island chain complex between Orange Street and Higgins Avenue Bridges and at undeveloped floodplain areas upstream and downstream from the city limits. The islands complex is not included in the proposed project area.

## 4.18 THREATENED AND ENDANGERED SPECIES

The Biological Assessment was prepared by Natural Resource Services as part of Endangered Species Act (Section 7 (a)) compliance by Montana Department of Transportation (MDT) for the proposed Orange Street Bridge project. Separate reports addressing wetlands and biological resources and sensitive plant and animal species provide additional information on the biological resources of the project area. See the Biological Resources Reports (Natural Resource Services, 1994) for more detailed information.

Montana has eight animals classified by the US Fish and Wildlife Service as either endangered or threatened. The endangered species are the Northern Rocky Mountain Wolf, Whooping Crane, Peregrine Falcon, Bald Eagle, Black-footed Ferret and Interior Least Tern. The continental U.S. populations of Grizzly Bear and Piping Plover are listed as threatened.

Of these eight species, seven are not considered to be endemic to the project area. Only the Bald Eagle has been observed along the Clark Fork River in the vicinity of the project area (D. Flath, 1994).

Bald Eagle.

> Bald eagles occur along the Clark Fork River as migrants and winter residents. There are no known nesting territories within several miles (one located near Milltown) of the project area, nor are any suspected to date (D. Flath, 1994). Bald eagle activity during the winter months, i.e., river fishing and resting in cottonwood trees on the island complex, was recorded near the Orange Street Bridge (W. Kerling, 1994).

It is not anticipated that any adverse affect will occur to the Bald Eagle resulting from the proposed bridge construction. It is not anticipated that any construction date restrictions would be necessary due to the Bald Eagle.

In a letter from the USFWS dated March 3, 1994, it was stated that "based upon the nature of the proposed work and the location of the project, we do not expect any project related impacts to threatened or endangered species." (See Appendix 1)

No known threatened and endangered plant species are known to occur in the project area.

## 4.19 UTILITIES IMPACTS

There are some utilities along the roadway corridor, including power, telephone, fiber optics, gas, sewer, and water. The proposed project will require the relocation or possible encasement of several of these utilities within the project corridor. Necessary relocation of existing utilities will be determined after evaluations are completed by the City of Missoula and the Montana Department of Transportation and the individual utility company. The phase development of the project will allow for a minimal amount of disruption to utility service as the lines are relocated.

All utility companies will be contacted regarding the proposed project and will be given the opportunity to relocate or upgrade their lines within the project area. Location and rerouting of any utilities will be coordinated with the City of Missoula to ensure that design provisions are included for any future adjustments or distribution modifications. All utility relocations will be handled in accordance with City of Missoula and the Montana Department of Transportation standard utility relocation policies. By designing the new roadway within the existing highway corridor as much as possible and away from the existing utilities, this project will have minimal impacts to the utilities. The new roadway will have very little impact on existing utilities.

## 4.20 SECTION 4(f)/ 6(f) IMPACTS

### 4.20.1 Section 4(f)

Section 4(f) of the 1966 U.S. Department of Transportation Act (49 U.S.C. 303) states that "special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." Section 4(f) requirements are applicable if a proposed roadway project:

> "Requires the use of publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge, of national, state, or local significance, or land of an historic site of national, state or local significance."

The requirements of Section 4(f) are also stated in 23 CFR Subsection 771.135(a) as follows:

> "The Administration may not approve the use of land from a significant publicly owned public park, recreation area or wildlife and waterfowl refuge or any significant historic site unless a determination is made that:
>
> a. There is no feasible and prudent alternative to the use of land from the property; and
>
> b. The action includes all possible planning to minimize harm to the property resulting from such use."

Both McCormick Park and the Clark Fork Natural Park would fall within these designations. Keeping the road grade at the current level would require considerably more fill in order to meet the current slope requirements. Lowering the grade as proposed in two of the alternatives allows the roadway to day-light on existing fill on the west side of the road (McCormick Park). With a lowered road section, the required fills on the east side of the roadway (Clark Fork Natural Park) can be much narrower and will blend easier with the existing contours of the park landscaping. No additional right-of-way would be needed in the park areas with the lowered road section. Construction easements would be utilized to shape and landscape the new road fills to the existing park features. This could be done without adversely impacting the parks and the current uses.

McCormick Park has a ropes course located just west of the existing roadway and it is approximately the same height as the existing roadway. This facility may experience some short term effects during the bridge and roadway construction for this project due to the close proximity to both the bridge and roadway. It will still be operable but may have distractions from the heavy equipment operating adjacent to it. This will be mitigated to the extent possible by coordinating with the City of Missoula Parks and Recreation Department and trying to schedule heavy equipment uses at times when the facility is not in operation. The amount of work to be completed on the roadway is minimal and this would be for a very short period of time. The bridge construction is mostly on the opposite side of the roadway and would have less of an effect. If needed, a screen could also be erected between the ropes course and the roadway to help keep the distraction to a minimum. This project should not substantially impair the purpose or function of this facility and therefore it would not constitute a constructive use of the facility. It would also not have any constructive use on other such public or historic facilities in the area.

The original design of the Clark Fork Natural Park was completed with the construction of a large mounded area next to the Orange Street right-of-way so that it could be connected in the future without detracting from the theme of the park. The lowered roadway will now be able to be contoured into the park and Riverfront Trail system design to complement and enhance the theme of the park and trail system. The access to these public facilities would be greatly enhanced and allow them to be used more for their intended purposes.

The historic lighting and use themes will also be extended from the existing parks and trail system to the Orange Street roadway level and will continue onto the newly proposed structure. This will tie the whole area into a coordinated system of trails, parks and roadways which will preserve the historic nature of this area as much as possible. These amenities are deemed necessary in order to maintain this important part of Missoula's history. The proposed improvements would have a positive affect on the adjacent parks

The Orange Street Bridge, the Old Milwaukee Railroad Overpass, and the Missoula/Dinsmore canals are also elements of concern. These elements are currently covered under Programmatic Memorandum of Agreements (PMoA's) which were discussed in more detail in Section 4.10. A copy of the PMoA is included in Appendix 2.

This project will not affect the historic nature of the existing canals as they will not be removed, relocated, realigned or disturbed. The existing box culverts will be extended to match with the existing canals and the canals will continue to function as always. The proposed project includes all possible planning to minimize harm to these facilities. Construction will only be allowed during non-irrigating seasons and the project will be coordinated closely with the irrigation company and the ditch rider to assure that the needs of the district are met.

The Historic Southside Neighborhood District is also adjacent to this project and has been carefully considered as to the possible impacts or effects that this project might have on the historic values of this part of the community. The three properties within the district closest to the project are located at 201, 205, and 207 Chestnut Street. This project will not affect any of the main buildings at these locations or their associated out buildings. The proposed widened fill will encroach onto the small orchard behind the structures and will probably require the removal of one of the trees. If needed, a short retaining wall could be incorporated into the design to protect this small orchard area. The fill slopes will be designed to blend better with the surrounding neighborhhood rather than the abrupt embankment that now exists. The visual impacts for the area will actually be softened by the lowering of road grade. This will allow for a better view of the surrounding community and will also blend with the contours and design of the adjacents parks. There will be some initial short term construction impacts to the area but these will be mitigated as soon as possible with the additional landscaping and plantings that will be designed as part of the project. The project will be designed to include all possible planning to minimize harm to this historic district and the individual elements within it.

The current volumes on this corridor (20,000± ADT) create a need for additional lanes to safely handled the traffic. The original structures were not designed for this loading condition and would therefore need to be upgraded as well as widened to bring them in compliance with the current standards. The modifications that would be required would be very expensive and difficult to do and additional lanes would require a separate structure to achieve the needed widths. These modifications and the addition of a new structure next to the existing bridge would obliterate the historic integrity of the structures. There does not seem to be any prudent and feasible way to keep them intact while maintaining their historic values.

The Milwaukee Railroad Overpass no longer serves a purpose with the abandonment of the rail line in 1980. Alternatives were also evaluated that would rehabilitate these structures or relocate the roadway. Relocation is not possible without significant social, economic and evironmental impacts. Any rehabilitation with the needed addition of lanes would seriously affect the historic integrity of the structure. The deficiencies that exist with the existing structures present a serious and unacceptable safety hazard to the travelling public. Therefore it is proposed that they be replaced.

The design of the proposed improvements will include as many impressions as possible from the original structures in order to preserve the historic values of this area. The new design will incorporate historic lighting along the corridor so that it will blend with the trail system and will do as much as possible to tie with the adjacent historic neighborhood districts. The intent will be to preserve as much of the historic value of this area as possible.

Preserving as much of the historic value of these structures as possible will be coordinated with the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP). All records will be kept in accordance with the Historic American Engineering Record standards and other suitable means available. It is not prudent or feasible to make these structures available for alternative uses at the present site. However, if a responsible party would wish to utilize and preserve portions of the structures at a different location, this will be coordinated with MDT, SHPO and the ACHP. These measures to minimize harm are included in the PMoA which is dated May 9, 1989 and which is included in Appendix 2.

The MDT cultural resource specialists have been consulted about these portions of this project in an attempt to preserve and maintain the historic values of this area. This coordination will continue throughout the design process as well.

The 4(f) properties within the project boundary are covered by programmatic agreements or will not be adversely affected by the proposed project, therefore an individual evaluation or 4(f) statement is not required. The detailed Programmatic Statements for the following elements are included in the Appendix 2:

*"Nationwide" Programmatic Section 4(f) Evaluation for Historic Bridges*

1. Abandoned Milwaukee Overpass Bridge
2. Orange Street River Bridge

*"Nationwide" Section 4(f) Evaluation*
*for minor usage of*
*Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges:*

1. Clark Fork Natural Park
2. McCormick Park
3. Bikeway System

*"Nationwide" Section 4(f) Evaluation for Minor Impacts*
*on*
*Historic Sites*
*Excluding Historic Bridge Replacements*

1. Missoula Canal
2. Dinsmore Canal
3. Historic Southside Neighborhood District

### 4.20.2 Section 6(f)

Properties receiving assistance from the Land and Water Conservation Fund (L&WCF) are subject to the provisions of Section 6(f) of the L&WCF Act, as amended. The provisions of the Act stipulate that:

> "changes from outdoor recreation use be approved by the Secretary of the Interior and require the substitution of other properties of at least equal fair market value and reasonably equivalent usefulness and location for the recreation lands to be taken."

McCormick Park (LWCF #30-00221 and #30-00385) as well as the Bikeway System (LWCF #30-00269) have received assistance from the L&WCF and are therefore subject to Section 6(f) requirements.

This project will not change the current use of any portion of McCormick Park or the Bikeway System but will rather enhance the current recreational uses by providing additional trail access from the roadway to the Park and Trail system and by improving the roadway access at Cregg lane. There are no 6(f) involvements or negative impacts as a result of this project.

## 4.21 HAZARDOUS WASTES

No known hazardous waste areas have been defined within the project boundaries. The existing bituminized plant mix surfacing will be salvaged and hauled to a site approved by Missoula County and the Montana Department of Transportation and all handling , storage and reuse of the surfacing will be in compliance with State and Federal regulations. There will not be any excavation on ground occupied (or previously occupied) by gas stations. If any hazardous materials are encountered during construction, then the Contractor will be required to follow a contingency plan as suggested by the AASHTO Task Force on Hazardous Waste in their Hazardous Waste Guidelines for Project Development.

## 4.22 CONSTRUCTION IMPACTS

Construction activity will cause some adverse environmental impacts which are unavoidable. These impacts will be of a temporary nature and all practical measures will be taken to minimize their impact.

Temporary construction impacts will include:

- Increased air pollution from heavy equipment emissions;
- Dust and emissions from the asphalt plant and crushers;
- Increased noise level due to heavy equipment;
- Erosion potential on fresh cut and fill areas;
- Inconvenience to highway users due to delays, detours and temporary surfacing;
- Irrecoverable use of natural resources used to power the construction activity as well as those used in the construction materials themselves.
- Temporary inconvenience to local facilities and businesses due to construction activities and detours.

The adverse impacts resulting from construction are expected to be minor and readily mitigated and minimized through specified and standard construction procedures. The State Air Quality Bureau controls permitting of asphalt plants and crushers. Dust control will be handled by watering or other acceptable methods. Reclamation of cuts and fills will be required both during and immediately after construction to minimize erosion. A thorough and effective traffic control plan will be designed and implemented to minimize inconvenience to motorists and local businesses and facilities.

## 4.23 PERMITS, AUTHORIZATIONS AND REVIEW AGENCIES

In accordance with MEPA requirements under ARM 18.2.239 the following list includes the permits, licenses, and other authorizations required of the state, local, or federal agencies that have overlapping or additional jurisdiction or environmental review responsibility for the proposed project and includes the responsible agency for each. Also required is a listing of other agencies or groups that have been contacted or who have contributed information for the proposed action and this has been included in Section 5.2 Agencies and Persons Consulted later in this document.

Air Quality Permit - The suppliers of asphalt materials and crushed rock needed for construction must have an air quality permit from the MDEQ Air Quality Bureau.

Section 404 Permit - A permit regulating the discharge of dredged or fill material into waters of the United States is requied under the provisions of Section 404 of the Federal Clean Water Act. Documentation and design plans must be submitted to the U.S. Army Corp of Engineers to determine the type of Section 404 permit required for the project.

Water Quality Permit - Section 401 of the Clean Water Act requires that the MDEQ Water Quality Division assure that the proposed discharges comply with specific standards before a federal permit can be issued. This certification is tied to the Section 404 permit process.

Temporary Water Use Permit - The Montana Water Use Act requires that a temporary water use permit be obtained from the Department of Natural Resources and Conservation, Water Resources Division if surface water or more than 132.5 liters per minute (35 gallons per minute) or 12,335 cubic meters (10 acre-feet) of ground water is needed for dust control or other construction related purposes.

124SPA Permit - The Montana Stream Protection Act contains measures to ensure that the fish and wildlife resources of Montana's waters are protected and preserved. The Act requires that FWP be notified of planned construction which may alter or affect any stream, stream bank, or tributary.

Stormwater Discharge Permit - The MDEQ Water Quality Division requires for all projects, that the contractor obtain a Stormwater Discharge Permit that will control the stormwater run-off in accordance with the approved MDT erosion control workplan that is included in the construction documents.

3(a) Authorization - Under the conditions of the Montana Water Quality Act, MDEQ may authorize short-term exemptions from surface water quality standards as necessary for most construction activities in or along streams. The FWP screens projects for MDEQ and can make the determination that short-term increases in turbidity are not significant. The contractor is generally reponsible for obtaining this authorization.

Memorandum of Agreement and Authorization (MAA) -This agreement, between the FWP and MDT, stipulates the provisions that will be used to maintain the quality of streams and the fisheries affected by highway-related construction. The MAA is intended to document compliance with the Montana Stream Preservation Act. The project plans and specifications will include the applicable provisions of this agreement.

Sole Source Aquifer - This project is located within the area designated by the EPA as the Missoula "Sole Source Aquifer". As such, the EPA, Region VIII must review the project for compliance with the provisions of the designation as to whether or not it poses a significant threat to the aquifer that would endanger public health. Mr. William J. Monheiser, of the Denver EPA office has been contacted and his letter of response is included in Appendix No. 1. His review has indicated that there would not be any "undue threat to the sole source of drinking water in the Missoula Valley" as a result of this proposed project. Also included in the appendix is a letter of response from the Missoula City/County Health Department regarding the issue. Their primary concern is the direct discharge of stormwater from the bridge into the river. All attempts will be made in the design of any proposed alternative to provide alternative methods of stormwater discharge so as to prevent drainage from being discharged directly into the river from the bridge.

The above permits, licenses and authorizations will be obtained prior to construction of the proposed project.

## 4.24 FUNDING

This project is seeking funding under Section 1008 of the Federal ISTEA (Intermodal Surface Transportation Efficiency Act) bill which is for Congestion Mitigation and Air Quality Improvement Programs (CMAQ). It is in effect from 1992 to 1997.

The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment of National Ambient Air Quality Standards (NAAQS) with a focus on ozone and carbon monoxide.

All projects and programs eligible for CMAQ funds must come from a conforming transportation plan and TIP, and be consistent with the conformity provisions contained in Section 176(c) of the Clean Air Act. Projects also need to complete the National Environmental Policy Act (NEPA) requirements, the Montana Environmental Policy Act (MEPA) requirements and be included in the appropriate statewide program. This document is prepared in compliance with both the National Environmental Policy Act and the Montana Environmental Policy Act.

Transportation projects and programs are eligible for CMAQ program funds only if they meet certain criteria spelled out in the ISTEA. Transportation activities in approved State Implementation Plans (SIP) are eligible projects and are generally given the highest priority for

CMAQ funding. Their air quality benefits will generally have already been documented. If not, such documentation is necessary before CMAQ funding can be approved. The transportation activity must contribute to the specific emission reductions necessary to bring the area into attainment. The construction of bicycle and pedestrian facilities are also eligible under the CMAQ funding guidelines.

Decisions regarding the level and type of air quality analysis, as well as the credibility of its results, are left primarily to the FHWA field staff, in consultation with EPA. While no method is specified, every effort must be taken to ensure that determinations of air quality benefits are credible and based on a reproducible and logical analytical procedure that will yield quantitative results of emission reductions.

Missoula is designated as a non-attainment area for CO emissions and is therefore eligible for CMAQ funds. The proposed project not only shows a net reduction in the CO emissions, but also includes the construction of pedestrian and bicycle facilities which will encourage the use of non-motorized modes of transportation. The separate pedestrian/bicycle bridge will reduce total VMT and will also add to the reduction of the CO emissions. These elements combined, make this total project an excellent example of a candidate eligible for CMAQ funding.

Section 4.8 Air Quality Impacts addresses the potential reductions in the CO and PM-10 pollutant levels and shows positive indications that this project will greatly benefit air quality and contribute to the emission reductions necessary to bring the area into attainment. It is therefore recommended that this project receive matching funds through the federal Congestion Mitigation and Air Quality program.

# SECTION 5. COMMENTS AND COORDINATION

## 5.1 Early Coordination

Coordination efforts were initiated by the City of Missoula on February 8, 1994 when a Letter of Intent was issued to federal, state, and local agencies and affected private organizations. Comments and information were requested which would be relevant to this project.

## 5.2 Agencies and Persons Consulted

Comments from agencies responsible for the protection and management of the State and National resources in the project area were obtained following the circulation of the letter of intent. The agencies and persons that were contacted for comments on this project are shown on the master list included in Appendix 3.

Continued coordination was pursued with appropriate agencies and the public to assure a design concept that would minimize adverse impacts on the surroundings.

## 5.3 Opportunities for Comments

A Public Scoping Meeting was held on February 23, 1994 at the Roosevelt School, 503 Edith Street, Missoula, to acquaint the public with the proposed project. Follow-up meetings were held with the following groups:

- March 8, 1994 - Missoula Downtown Association at Zimorino's Restaurant Banquet Room.
- March 14, 1994 - McCormick Neighborhood Association, Riverfront Neighborhood Association, Southside Neighborhood Alliance (combined meeting) at Willard School.
- March 15, 1994 - Missoula Redevelopment Agency Board at City Council Conference Room.
- March 15, 1994 - Save Open Space Inc. at City Council Conference Room.
- March 17, 1994 - Montana Society of Engineers at Sizzler Restaurant.
- March 25, 1994 - Chamber of Commerce Transportation Committee at Chamber of Commerce offices.

- April 5, 1994 - Kiwanis at Village Red Lion

- May 4, 1994 - Bicycle/Pedestrian Advisory Board at City Council Conference Room.

- May 9, 1994 - Eagle Watch Estates, Accessible Space Inc. at Eagle Watch Estates conference room.

- May 16, 1994 - Fox Site Assisted Living Center (meeting with developer and architect) at Missoula Redevelopment Agency conference room.

- May 17, 1994 - Convention and Visitors Bureau (display for Missoula Expo) at Holiday Inn Parkside.

- First Wednesday of every month throughout project - Bicycle/Pedestrian Advisory Board meetings (brief update reports, questions and answers usually at City Council conference room).

- Other - phone calls and correspondence with:

    - BikeMissoula
    - Will Kerling, local wildlife observer

- Local government meetings, participation and input:

    - February 8, 1994 - City Council Public Services Committee at City Council conference room (project description).

    - March 8, 1994 - City Council Public Services Committee at City Council conference room (National Environmental Policy Act (NEPA) process description).

    - May 9, 1994 - Full City Council at Council Chambers (project update).

    - September 12, 1994 - Full City Council at Council Chambers (project update).

Comments from these meetings are included in Appendix 3.

Three Stakeholder Concepts teams were assembled to assist in generating and refining ideas, identifying and crystallizing issues and concerns, assist in developing and reviewing alternative concepts and alternative selection criteria, and to assist in assigning weights to these criteria.

The makeup of the Stakeholder Concept teams, the meeting agendas and a summary of the comments are included in Appendix 3. The teams met a scheduled three times at Clark Fork Riverside Retirement Center (301 West Front Street) (adjacent to the Orange Street Bridge) on:

- March 1, 1994
- April 5, 1994
- May 31, 1994

An additional Stakeholder Concept Team meeting was held at the participants' request at Clark Fork Riverside Retirement Center on:

- April 26, 1994

Another Public Scoping Meeting was held at the Roosevelt School on March 30, 1994. Significant public comment was received at these meetings and items of concern addressed, noted and incorporated into the preliminary design. A summary of the Public Scoping Meetings comments is included in Appendix 3.

A Public Information Meeting was held on May 11, 1994 at Roosevelt School to present alternatives and options developed through public involvement and to receive public comment.

Since the completion of the draft Environmental Assessment there was another Public Informational Meeting (Location & Design Hearing) held on September 28, 1994 at the Roosevelt School, at which the public comment was very positive and approving of the proposed project at the perferred alternative location. There were some suggestions that were received regarding design issues and these have been summarized in Appendix 3 along with the summaries from the previous meetings. All comments will be considered in the final design phase as appropriate.

The Missoulian, the local newspaper, gave the community an opportunity to tell local government officials how available money should be spend on transportation projects. Approximately 150 readers responded and **Figure 20** is a summary of the results of their poll. It should be noted that the Orange Street Bridge project was ranked number 2 out of 21 different options that were made available, even though it was shown as being the most costly project. The number 1 project, the Areawide Traffic-signal Project is currently being designed and is scheduled for construction in the spring of 1996.

In December, 1995 the National Highway System Reauthorization Act of 1995 was signed which included a provision which states on page 100: "(d) ORANGE STREET BRIDGE, MISSOULA MONTANA. - Notwithstanding section 149 of title 23, United States Code, or any other provision of law, a project to construct new capacity for the Orange Street Bridge in Missoula, Montana, shall be eligible for funding under the congestion mitigation and air quality improvement program established under such section. This will make allowances for the funding of this project to proceed.

FIGURE 20.

**MISSOULIAN EDITORIAL**

# Spend the money wisely

**SUMMARY:**
Readers offer good advice for spending traffic windfall.

Take a close look at the next Mountain Line bus you see. Odds are, it will be nearly empty. That goes a long way toward explaining our readers' priorities for spending nearly $30 million in federal transportation grants.

Nearly 150 readers responded to our invitation to tell local government officials how the money should be spent. By a convincing margin, they gave highest priority to projects aimed at improving traffic congestion and making it easier for cyclists and pedestrians to get to and fro. They rated as the lowest priority money for buses, park-and-ride lots and an off-street transit facility.

Our readers' rankings, shown in the chart at the right, seem common-sensical enough. Their priorities reflect how people get about the town — they drive cars, ride bikes and walk; relatively few ride the bus. Note the highest priority — an areawide traffic-signal project to make traffic flow smoother everywhere. No. 2 is widening Orange Street Bridge to handle more cars and make it safer for bikers and pedestrians. Nos. 3 and 4 are projects aimed primarily at cyclists and pedestrians.

Interestingly, improvements to Malfunction Junction ranked fifth in priority. It was carbon monoxide levels at the Brooks-South-Russell intersection that qualified Missoula for all that federal money in the first place. The fact it ranks several notches below our readers' top priority probably reflects a sense that it'll be easier to reduce traffic flowing to the intersection than making that intersection itself function smoothly.

Not reflected in these rankings are sentiments of nearly a dozen readers who, as the Missoulian has, question the appropriateness of spending this money in the first place. While it's obvious local officials have no intention of rejecting the money, the send-it-back message shouldn't be dismissed altogether. If nothing else, that message springs from the presumption the federal grants will be wasted — used
say, to improve a bus system f
people will use. The best way t
counteract such pessimism is
local government officials to
adopt a list of spending priorit
that jibes with community ne
and expectations.

## How Missoulian readers would spend the money

| PROJECT | Est. cost | Ranking (1-21) |
|---|---|---|
| Bicycle/pedestrian coordinator supplement | $72,000 | **13** |
| North Reserve Street transit/bicycle/pedestrian projects | $2,700,000 | **4** |
| Areawide traffic-signal project | $2,500,000 | **1** |
| Primary sidewalk network | $4,100,000 | **3** |
| Bicycle commuter network | $622,500 | **10** |
| Bicycle lanes | $325,000 | **6** |
| Off-street transit facility | $2,075,000 | **20** |
| Orange Street Bridge | $5,100,000 | **2** |
| Bus system upgrade: Replace 10 buses | $2,300,000 | **16** |
| Alternatively fueled downtown circulator bus and operating assistance | $430,000 | **14** |
| Bus replacement | $45,000 | **21** |
| South Avenue walk/bikeway: Reserve to 38th | $238,000 | **9** |
| Brooks-South-Russell traffic improvement | $5,000,000 | **5** |
| South Avenue: Grant to Reserve | $100,000 | **7** |
| Northside bicycle/pedestrian access | $795,000 | **8** |
| California Street Bridge | $550,000 | **11** |
| Park & Ride lots: I-90 & Grant Creek; South side of town | $685,000 | **19** |
| Northside bicycle/pedestrian access No.2 East | $795,000 | **12** |
| Inspection and maintenance program | $107,000 | **17** |
| Bus bicycle racks (10) | $10,000 | **15** |
| Operating assistance for new Lolo route | $180,000 | **18** |

# APPENDIX 1

*(THE FOLLOWING ITEMS ARE REFERRED TO IN THE ENVIRONMENTAL ASSESSMENT TEXT IN SECTIONS 1 THROUGH 4)*

# Bridge Needs Study
# Missoula, Montana

*Prepared for*
Missoula Office of Community Development

*In Cooperation with the*
Montana Department of Highways
Planning and Statistics Bureau

*and the*
Department of Transportation
Federal Highways Administration

*Prepared by*
Robert Peccia and Associates
Helena, Montana
*with assistance from*
Stensatter Druyvestein & Associates
Missoula, Montana

Adopted January 24,1990
Missoula Technical Advisory Committee

This document reflects the views of Robert Peccia & Associates and Stensatter Druyvestein & Associates, who are responsible for the accuracy of the data presented in this study. The contents do not necessarily reflect the official views of the Federal Highway Administration or the Montana Department of Highways.

---

## Site 3
## Orange Street
## Old Milwaukee Overpass

## SITE 3 - ORANGE STREET OLD MILWAUKEE OVERPASS

### A. General Data

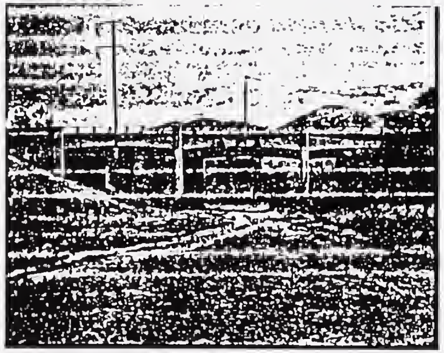
| | |
|---|---|
| MDOH Bridge Number: | U 08107 00+0.410-1 |
| Features Crossed: | Irrigation canal and abandoned railroad |
| Number of Traffic Lanes: | Two |
| Roadway Lighting: | Yes |
| Sidewalks: | 5-feet-wide both sides |
| Deck: | Concrete with asphalt overlay |
| Width and Length: | 43 feet by 209 feet |
| Number of Spans: | 3 Main - Concrete girder |
| Substructure: | Concrete bents |
| Year Built: | 1936 |
| Rehabilitation: | None |
| Design Loading: | H15 |
| MDOH Sufficiency Rating: | None |

### B. Summary of Structural Evaluation

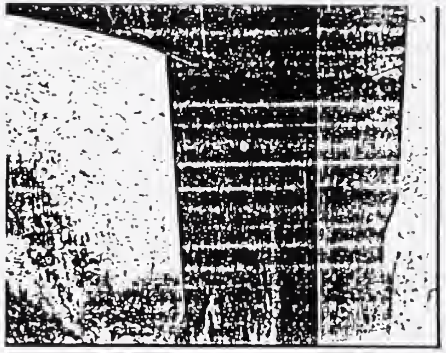
This bridge is in fair condition. The concrete deck, which has been overlayed with asphalt, shows signs of some deteriation. There is vertical and diagonal cracking in all of the support beams, but they still appear to be satisfactory and serviceable. The support bents have areas of large spalls and cracking, but are also functional.

There are no approach guardrails, and the bridge railings are inadequate by current standards. The sidewalks and curbs have some spalling and vehicle damage, but are serviceable (see Photo Plate No. 3).

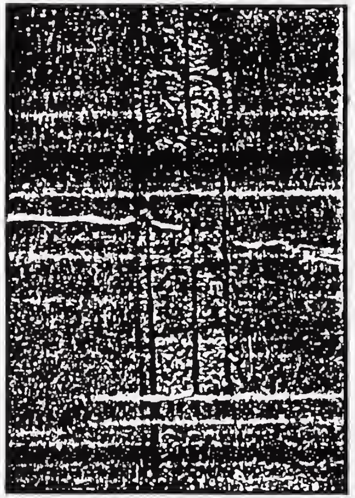
## PHOTO PLATE NO. 3 - ORANGE STREET OLD MILWAUKEE OVERPASS



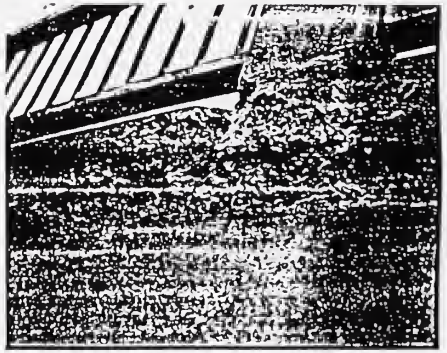
The Old Milwaukee overpass was built in 1936 and consists of concrete girders on concrete bents. The old railroad bed has been completely removed.



Concrete cracking and spalling have caused some exterior delamination of this bent.



The structural steel in this abutment column is exposed from concrete deterioration.



This concrete bridge railing connection has been weakened by cracking and spalling concrete.

## C. Summary of Operational Analysis

### 1. Bridge

The average daily traffic on this bridge in 1988 was 15,700 vehicles. This volume is projected to increase to 19,600 by the year 2000 and to 21,900 vehicles by the year 2010.

A plan view of this overpass showing the adjacent river bridge is shown in Figure No. 8.

This 2-lane bridge is adequately handling the current traffic volume, but it will become a problem as traffic increases. The Orange Street corridor south of the bridge is planned to be widened to 4-lanes in the future. When this occurs the two lane bridge will be a major bottleneck.

From an operational standpoint, this bridge is no longer needed due to the closing of the Milwaukee Railroad Line. The canal can cross under Orange Street using a conventional culvert, while the pedestrian and bicycle traffic traveling along the Old Milwaukee railroad alignment can be reroute under the river bridge. The concept of providing an underpass structure at this location for pedestrian and bicycle traffic was examined and considered undesirable from a safety standpoint.

## D. Recommended Improvements

### 1. Remove Overpass

Although this bridge is in fair condition, it is no longer needed. It should be maintained only on a cost effective basis. This bridge should be scheduled for removal consistent with the cost of maintenance and the overall roadway plan for the Orange Street corridor. A concrete box culvert or a multiplate steel arch pipe should be used for the canal when the bridge is removed. The bridge opening should be filled in to the new road grade incorporating the demolished bridge material in the fill. The new road grade should be lowered as design permits.

Estimated Cost: $ 370,000

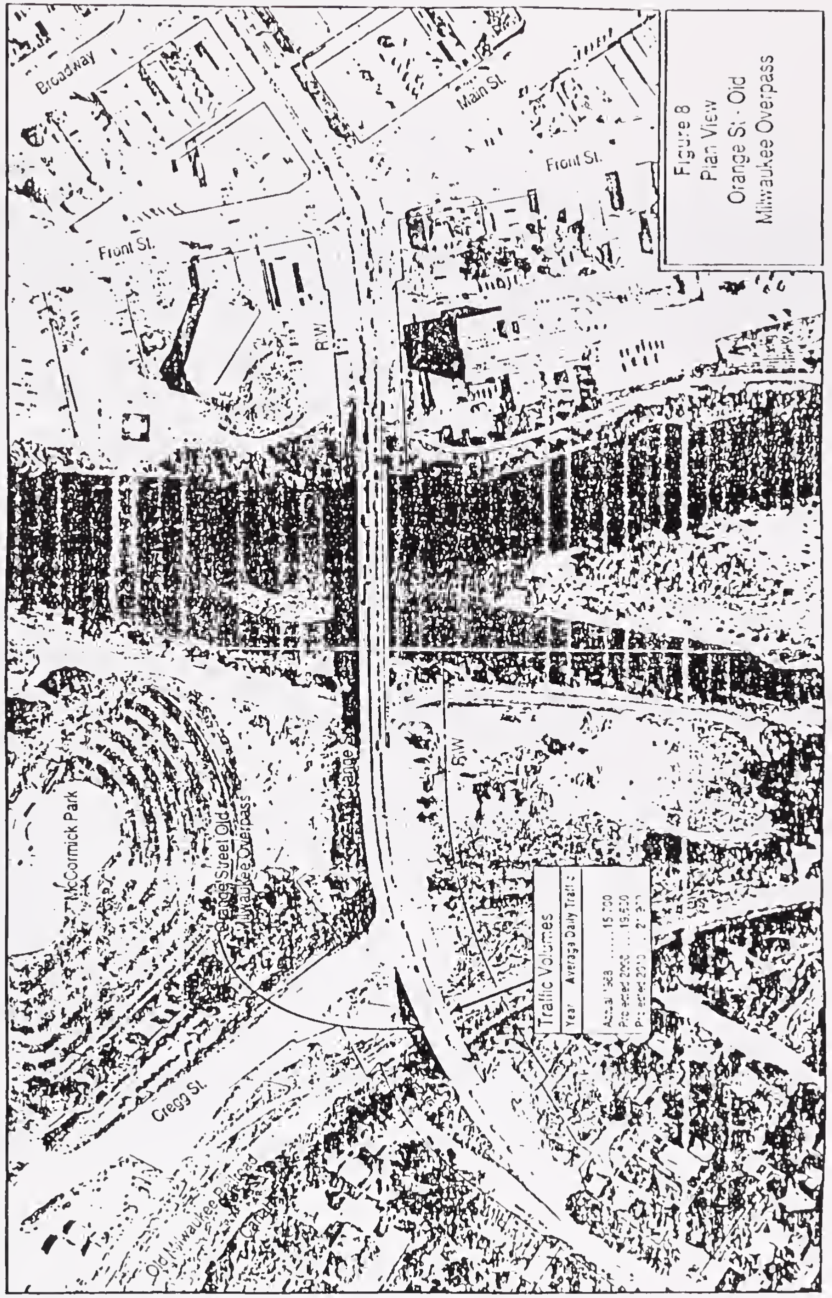


Figure 8
Plan View
Orange St - Old
Milwaukee Overpass

# Site 4
# Orange Street River Bridge

## SITE 4 - ORANGE STREET RIVER BRIDGE

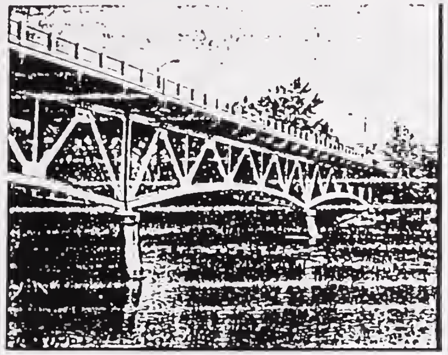
### A. General Data

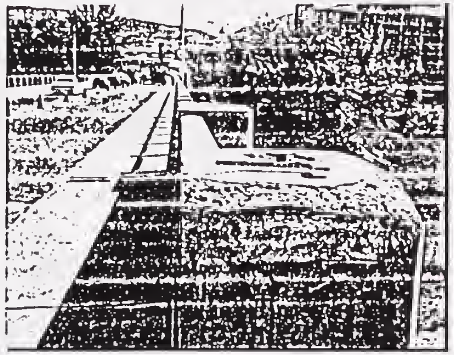
| | |
|---|---|
| MDOH Bridge Number: | U 08107 001+0.540-1 |
| Features Crossed: | Clark Fork River |
| Number of Traffic Lanes: | Two |
| Roadway Lighting: | Yes |
| Sidewalks: | 5-feet-wide both sides |
| Deck: | Concrete with asphalt overlay |
| Width and Length: | 43 feet by 503 feet |
| Number of Spans: | 3 Main - Steel deck truss |
| Substructure: | Concrete piers and bents |
| Year Built: | 1937 |
| Rehabilitation: | None |
| Design Loading: | H15 |
| MDOH Sufficiency Rating: | 49.0 |

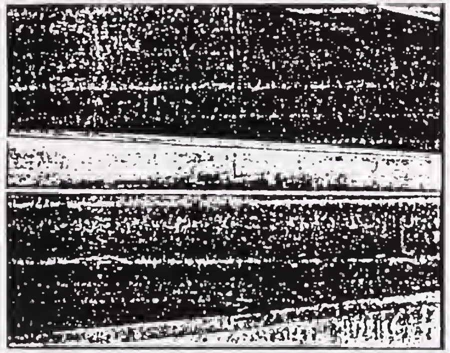
### B. Summary of Structural Evaluation

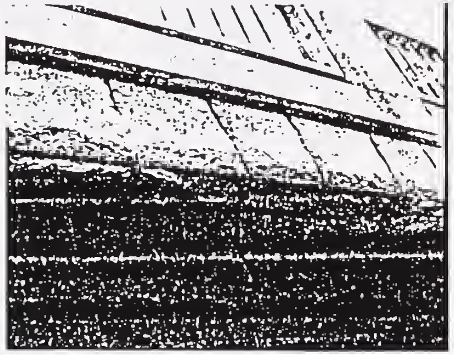
The overall condition of the bridge is fair, but it does have deficiencies that should be corrected with heavy maintenance and some rehabilitation. The deck is covered with an asphalt overlay so the top of the original concrete deck cannot be observed. Efflorescence under the deck indicates that there is some concrete deterioration. The joints are uneven with the deck and all of them leak, causing heavy rusting of steel members and bearings and concrete spalling. The concrete reinforcing on the underside of the sidewalks is exposed causing accelerated deterioration. The guardrails on the bridge have some damage and have massive concrete end sections that are fully exposed to traffic. Although the approach from the south is on a high fill, there are no approach guardrails (see Photo Plate No. 4).

# PHOTO PLATE NO. 4 - ORANGE STREET RIVER BRIDGE


The Orange Street Bridge, built in 1937, is a steel truss on concrete piers and bents. The steel truss needs to be cleaned and repainted to prevent additional corrosion and rust.


This section of bridge railing shows extensive concrete deterioration.


The web of this lateral steel end brace has rusted completely through due to water leaking from the deck joint above.


The bridge deck has deteriorated due to cracking and spalling of the concrete. Note the exposed rebar.

---

## C. Summary of Operational Analysis

### 1. Bridge

The Orange Street bridge is a 2-lane structure with 15-foot-wide driving lanes and 5-foot-wide sidewalks. This bridge carried approximately 15,700 vehicles per day (VPD) in 1988. By the year 2010 this volume is projected to increase to 21,900 VPD. The existing bridge is operating poorly under the current traffic volume loadings.

### 2. Bridge Approaches and Adjacent Intersections

The Orange Street corridor and the adjacent intersections will tend to control the size of the bridge. Orange Street from Front Street north to Alder Street was recently reconstructed to a 60-foot-wide, 4-lane road with a center double left turn lane.

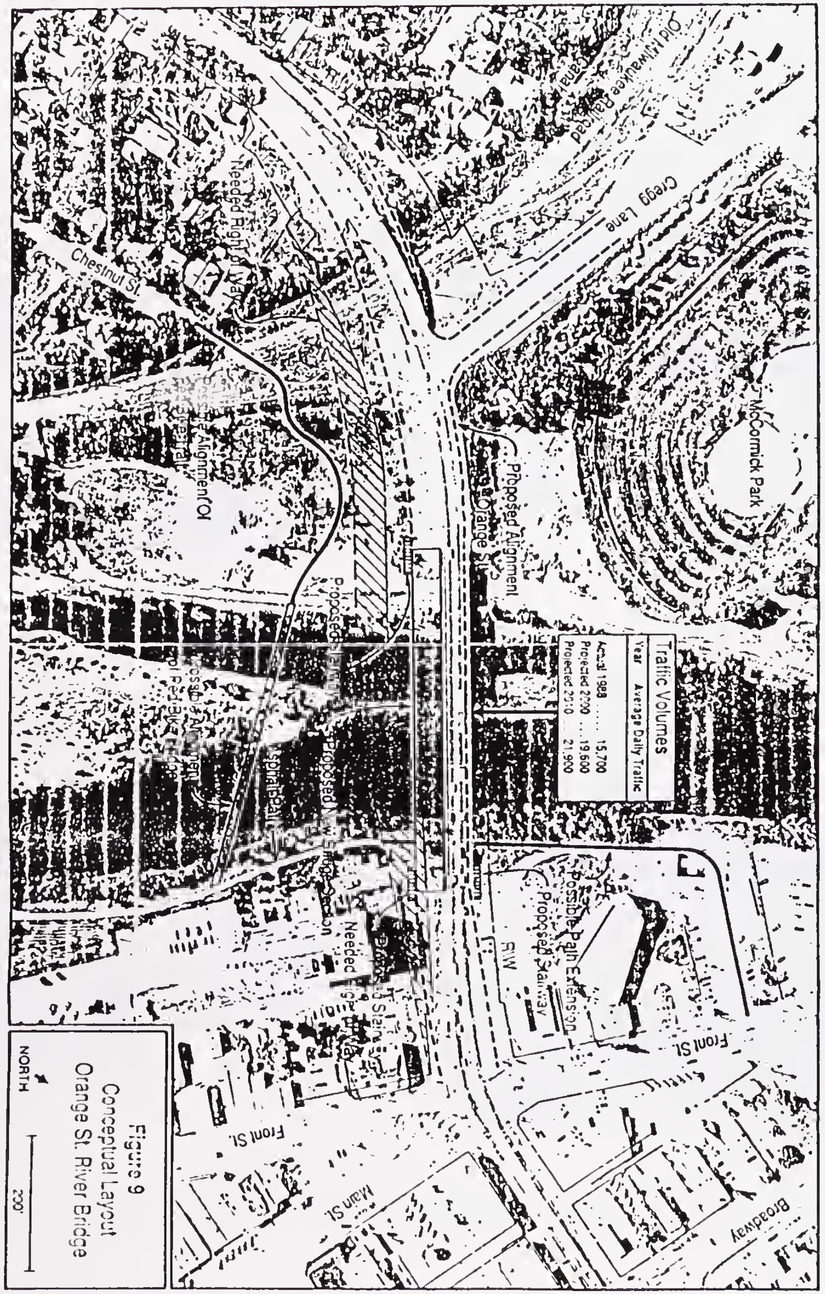
Orange Street from Stephens Avenue north to the 1st Street intersection is planned to be similarly widened in the early 1990's. It will become very desirable to have a 4-lane bridge over the river at that time.

The logical and most cost effective method of widening the bridge is to construct another structure immediately adjacent to the existing one. The existing right-of-way and the alignment of the roadway suggest that the new structure should go on the upstream side of the existing bridge. Figure No. 9 shows the right-of-way limits and a conceptual layout of the new bridge and the approaches. Additional right-of-way will be required on both sides of the river to accomodate the new structure.

It is assumed that the Old Milwaukee Overpass will be removed at the time the river bridge is expanded to four lanes. After the overpass is removed, the height of the roadway can be lowered to produce a flatter approach grade to the river bridge. Lowering the level of the roadway will also improve the grade on Cregg Lane which leads down to McCormick Park. Figure No. 10 shows a profile view of the Orange Street bridge and the possible grade change to the south approach.

A review of the signalized intersections on Orange Street adjacent to the bridge confirms the need for a 4-lane corridor and bridge.

The intersection of Orange, Front, and Main Streets was recently modified when Orange Street was widened. The intersection has a 4-lane road to the north and a 2-lane bridge to the south. The two south-bound lanes are required to merge into one lane between the intersection and the bridge. Figure No. 11 shows a schematic layout of the current intersection.



| Traffic Volumes | |
|---|---|
| Year | Average Daily Traffic |
| Actual 1988 | 15,700 |
| Projected 2000 | 19,600 |
| Projected 2010 | 21,900 |

Figure 9
Conceptual Layout
Orange St. River Bridge

Figure No. 10 - Profile View - Orange St. River Bridge

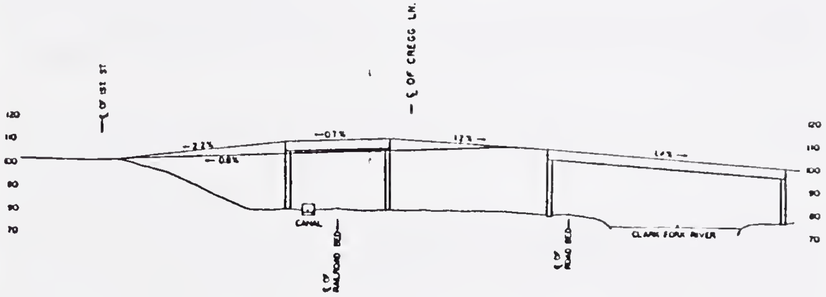
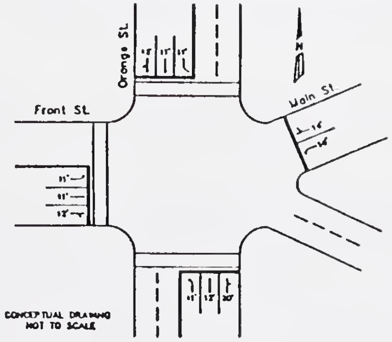


Figure No. 11 - Intersection of Orange, Front, and Main

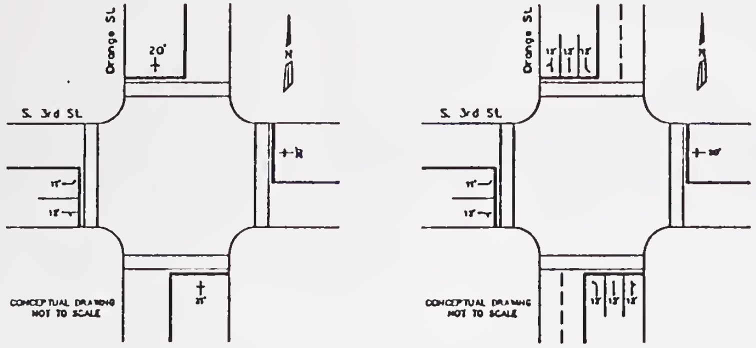


EXISTING CONFIGURATION

The intersection operates as if there is only one south-bound lane due to the far side merge. This intersection is currently operating at an unsatisfactory level-of-service E. If, in the near future, the bridge was widened to four lanes, thereby eliminating the merge condition, the intersection would operate at a satisfactory level-of-service C. This intersection configuration will provide an adequate level-of-service through the year 2010.

The intersection of 3rd and Orange Streets is also operating at an unsatisfactory level-of-service E. Figure No. 12 shows the current intersection configuration and the configuration that will be required to adequately handle the current and future traffic volumes. The intersection will operate at level-of-service B when Orange Street is widened to four lanes, and will continue to operate at this level through the year 2010.

Figure No. 12 - Intersection of 3rd and Orange



EXISTING CONFIGURATION

CONFIGURATION NEEDED FOR YEAR 2010 TRAFFIC

The intersection of Orange Street and Cregg Lane creates a minor operational problem. The intersection is located between the river bridge and the overpass structure. The left-turn movements into Cregg Lane tend to disrupt the flow of traffic on Orange Street. There is not enough roadway width on Orange Street at this time to accommodate a north-bound left turn lane. The left-turn movement from Cregg onto Orange is also difficult due to the limited sight distance caused by the overpass structure.

### 3. Pedestrians and Bicyclists

The McCormick Park on the south side of the river and the trails on both sides of the river tend to increase the pedestrian and bicycle activity in the area. Currently the only way for a pedestrian or bicyclist to travel down to the riverside park area, south of the bridge, is to use Cregg Lane. On the north side of the river, there is only a steep dirt path on the west side of the bridge that leads to the paved path that extends to the east along the river. It is desirable to provide some facilities that will enable the pedestrian and bicyclist to access these areas along the river. The addition of stairs on both sides of the north end of the bridge and on the upstream side of the south end will provide for pedestrian access.

The Missoula Redevelopment Agency (M.R.A.) is planning to make several possible improvements to the riverside area. Their plans include a pedestrian/bicycle bridge across the river upstream from the Orange Street bridge. They also plan to extend the path on the north side of the river to the west where it will connect with Front Street. The M.R.A. is also planning to expand the trail system on the south side of the river including a connection to Chestnut Street. These possible improvements are shown in Figure 9.

## D. Alternatives Considered

### Alternate No. 1

This alternate includes the construction of a new, 37.5-foot-wide, 2-lane, steel girder bridge adjacent to the existing structure on the upstream side. The existing bridge would be rehabilitated to provide a new deck and sidewalk that match the new bridge. The existing bridge would also be upgraded to meet the required HS-20 load rating. The estimated life of the structure would be at least 25 years for the truss and 50 years for the steel girder. The construction costs are estimated to be $2,210,000 for the new steel girder structure and $1,055,000 for the rehabilitation of the existing truss. Modifying the bridge approaches will cost approximately $935,000.

Total Estimated Cost: $4,200,000

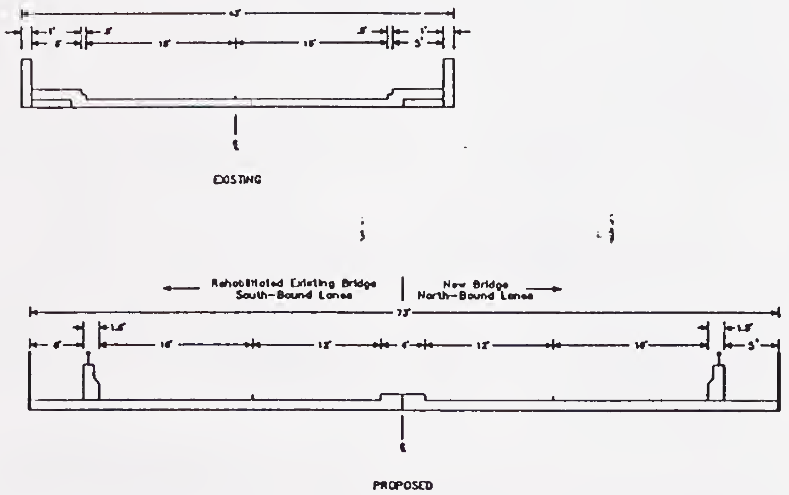
### Alternate No. 2 (Preferred)

A new structure as indicated in Alternate No. 1 would be built with a lower grade at the south end making the bridge essentially level. The existing truss would be removed and another steel girder structure would be built in its place using the existing piers. The estimated life of the structures would be 50 years. The cost of the new steel girder structure is estimated to be $2,160,000. Removing the existing truss and constructing a second steel girder bridge on the existing piers will cost an estimated $1,780,000. Modifying the bridge approaches will cost approximately $880,000. This alternative is considered to be more cost effective in the long run and is therefore preferred over Alternate No. 1.

Total Estimated Cost: $4,820,000

Figure No. 13 shows a typical section of the bridge deck for the proposed structure. This section can be used on either alternative.

Figure No. 13 - Proposed Typical Section - Orange St. Bridge



## E. Recommended Improvements

### 1. Repair and Maintenance of Existing Bridge

This bridge is in fair condition, but it should be improved as soon as possible. This work should include providing water control at the bridge deck joints, repair of the concrete substructure, and the cleaning and painting of the truss members and bearing assemblies.

Estimated Cost: $135,000

### 2. Widen Bridge to Four Lanes (Alternate No. 1)

This work should be done in two phases. Phase 1 would involve constructing the new steel girder bridge. At the beginning of phase 2 the traffic would be shifted to the new bridge. The existing bridge would then be rehabilitated and the approaches modified.

Estimated Cost: $4,200,000

### 3. Improve Pedestrian and Bicyclist Facilities

Provide a 12-foot-wide paved path for combined pedestrian/bicyclist use along the toe of the fill on the east side of the south approach embankment. Also provide stairs on both sides of the north end of the bridge.

Estimated Cost: $30,000

# RESOLUTION NUMBER 5580

A RESOLUTION OF THE MISSOULA CITY COUNCIL EXPRESSING SUPPORT FOR THE PRESERVATION, IN ITS NATURAL ECOLOGICAL STATE AS OPEN-SPACE LANDS, THE ISLAND COMPLEX IN THE CLARK FORK RIVER LOCATED IMMEDIATELY EAST OF THE ORANGE STREET BRIDGE IN BETWEEN THE HIGGINS AVENUE AND ORANGE STREET BRIDGES.

WHEREAS, preservation in its natural ecological state as open-space lands serving as a wildlife sanctuary or refuge the island complex located immediately east of the Orange Street Bridge in the Clark Fork River between the Higgins Avenue and Orange Street bridges in the City of Missoula is desirable for the wildlife species utilizing the island complex as well as the aesthetics and health of the Missoula community while preserving open space, wildlife and natural areas in the immediate Missoula urban area; and

WHEREAS, numerous citizens of the Missoula community have requested that the Missoula City Council go on public record as supporting the preservation of this Clark Fork River Island complex in its natural ecological state as an open-space wildlife sanctuary or refuge; and

WHEREAS, concerned citizens of the Missoula community who have studied the wildlife on this Clark Fork River Island complex have determined that during 1993 the island complex held over fifty (50) nests for fifty (50) pairs of various bird species not including doves or pigeons; and

WHEREAS, these concerned citizens of the Missoula community have determined that currently there are sixty (60) species of birds as well as a variety of mammals that have used this island complex, and

WHEREAS, this Clark Fork River island complex should be protected as a wildlife sanctuary or refuge in order to protect and nurture wildlife species utilizing the island complex as well as for providing a natural environment passageway for birds in transit to neighboring foothills and mountains as well as a resting and feeding place for migratory shore birds; and

WHEREAS, threatened species such as eagles and osprey have rested and fished on the island complex and may in the future nest there if a platform were provided for their nesting;

WHEREAS, this island complex in the Clark Fork River is truly a natural community treasure providing an important natural connection between the Clark Fork River; and

WHEREAS, this Clark Fork River island complex in the middle of a busy urban setting that is rapidly growing and developing should be preserved for scientific, educational, aesthetic and ecological values; and

WHEREAS, the State of Montana Department of State Lands and Fish Wildlife and Parks should be strongly urged to preserve this Clark Fork island complex in its natural state as a wildlife sanctuary and refuge.

WHEREAS, this Clark Fork River island complex should not be utilized for the installation of support pillars or abutments to support a bicycle pedestrian bridge or any other bridge;

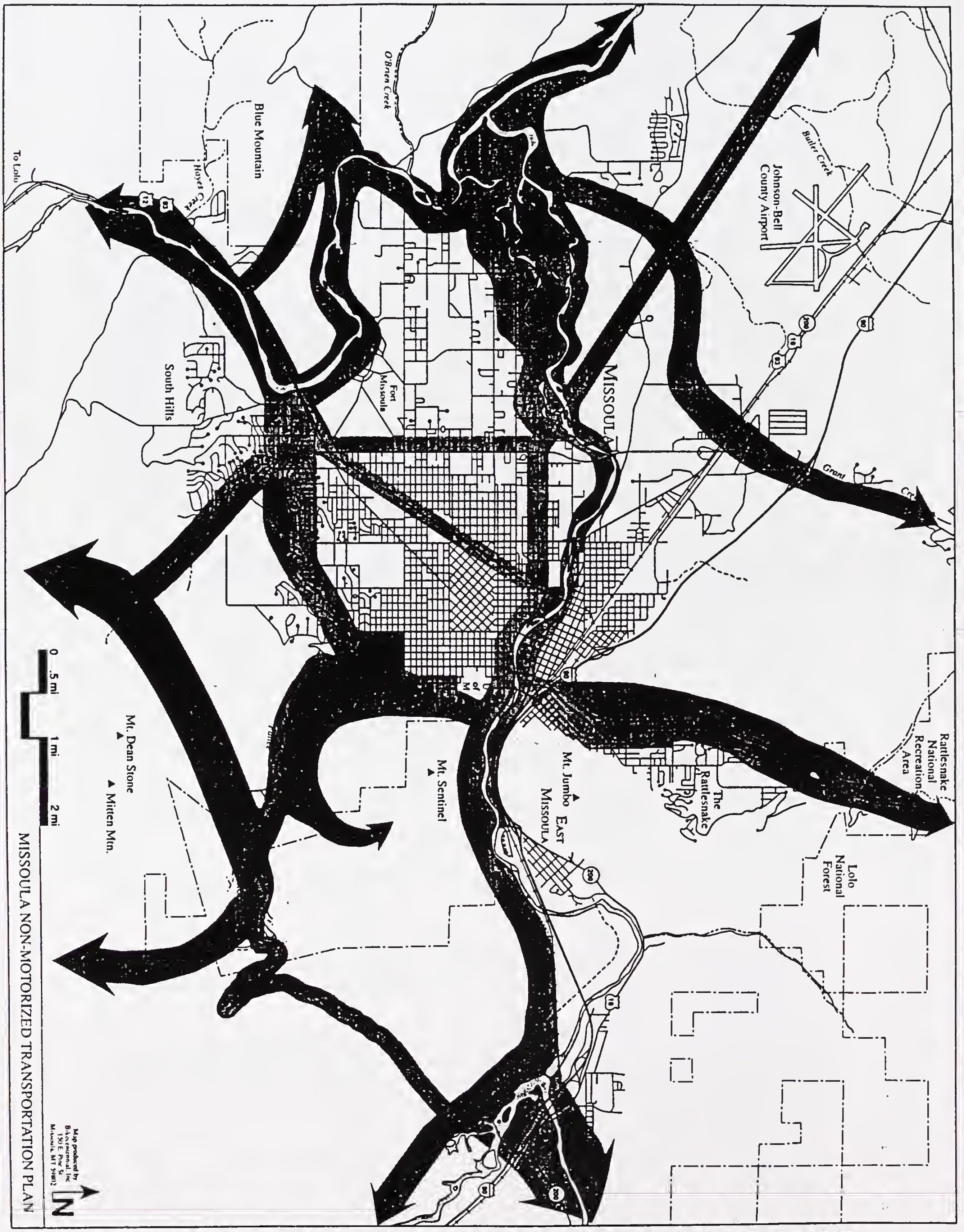
NOW THEREFORE, BE IT RESOLVED that the Missoula City Council strongly urges the State of Montana Departments of State Lands as well as Fish, Wildlife and Parks to take all action necessary to preserve this Clark Fork island in its natural state as a wildlife sanctuary and refuge.

BE IT FURTHER RESOLVED that the Missoula City Council strongly urges the State of Montana Departments of State Lands and Fish Wildlife and Parks to not issue any permits; licenses, easements or any other form of permission for utilization of this island complex for the installation of support pillars or abutments to support a bicycle pedestrian bridge or any other bridge.

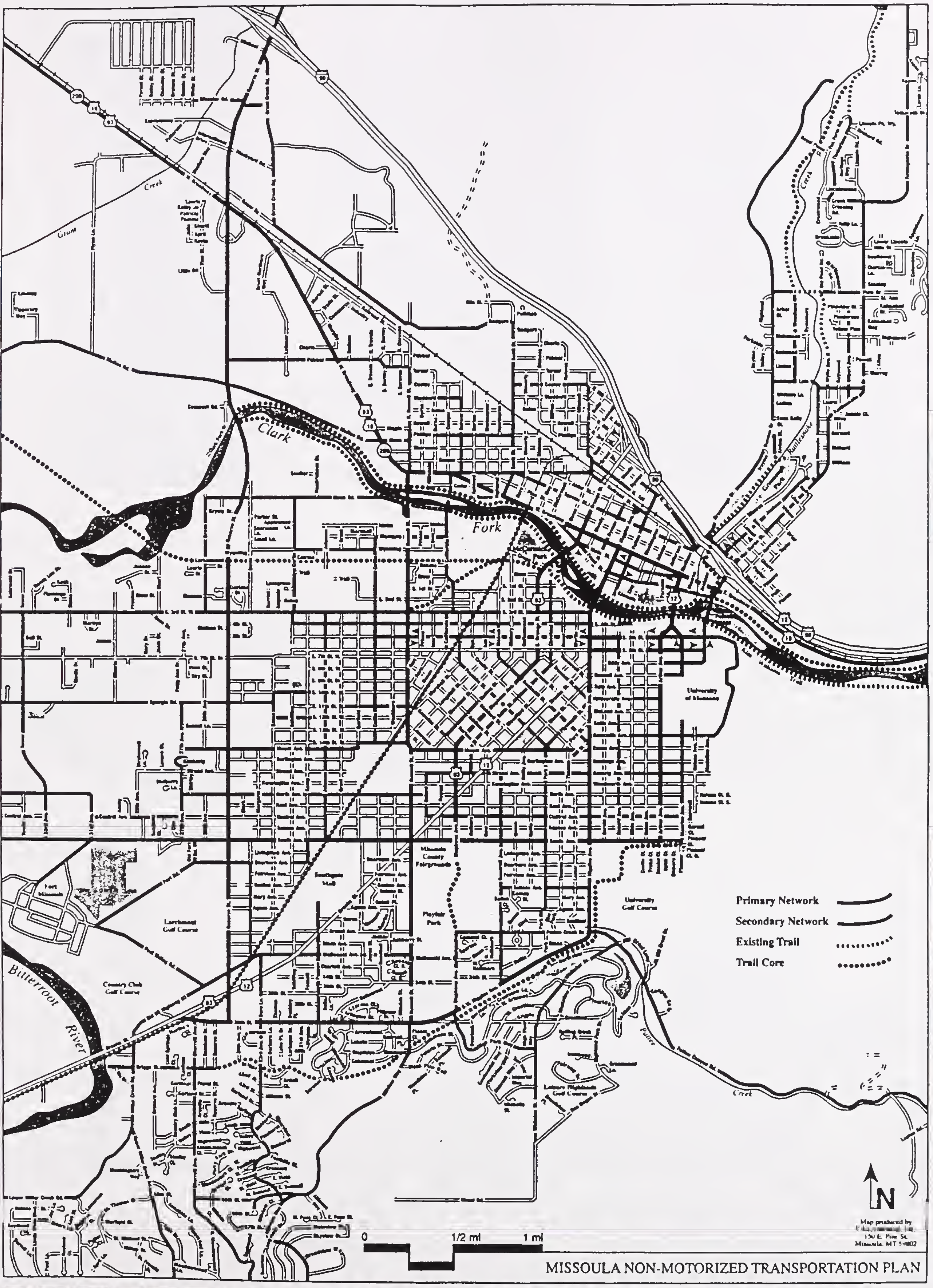
PASSED AND ADOPTED this 2nd day of May, 1994.

| ATTEST: | APPROVED: |
|---|---|
| /s/ Charles C. Stearns | /s/ Daniel Kemmis |
| Charles C. Stearns<br>Finance Officer/City Clerk | Daniel Kemmis<br>Mayor |

(SEAL)



# TRAILS/GREENWAY NETWORK



# PREFERRED STREET NETWORK

JUN 17 1994

A CMAQ PROPOSAL FOR

THE

# CALIFORNIA STREET NON-MOTORIZED BRIDGE FACILITY

Missoula, Montana

June 16, 1994

Montana Department of Transportation
Helena, Montana

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## CALIFORNIA STREET NON-MOTORIZED BRIDGE FACILITY
Missoula, Montana

## I. PURPOSE

This report provides pre-program information detailing a proposed bicycle-pedestrian bridge project located in Missoula, Montana. The following information on the California Street non-motorized bridge meets the Congestion Mitigation and Air Quality (CMAQ) program guidance issued by the Federal Highway Administration (FHWA) on October 16, 1992 by providing the scope of work and analysis of air quality benefits.

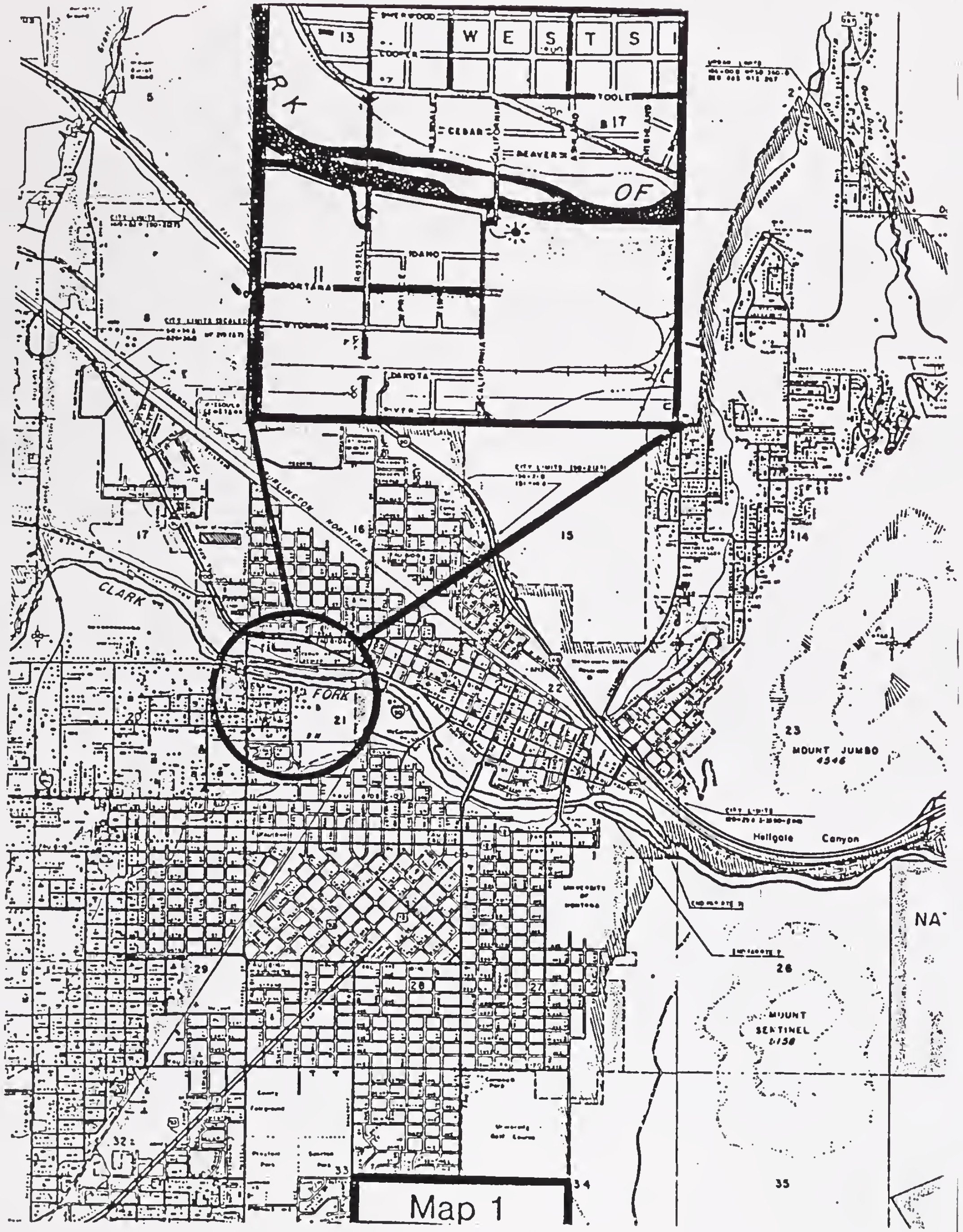
## II. BACKGROUND

Missoula was designated non-attainment for both carbon monoxide (CO) and total suspended particulates in 1978. It was redesignated non-attainment for Particulate Matter > 10 microns (PM-10) in 1987 and continues to be in non-attainment (classified 'moderate') for CO. Being the only CO non-attainment area in the state of Montana, the vast majority of CMAQ funds are being obligated in Missoula. The California Street non-motorized bridge is one project targeted for CMAQ funding.

The California Street non-motorized bridge has been identified as a need in the Missoula Non-Motorized Transportation Plan and is also contained in the current conforming Metropolitan Transportation Improvement Program (TIP). Upon approval, a consultant will be hired for the environmental clearances and to design the bridge. Local (city) funds will be used to match the federal funds. Construction of this project is anticipated in 1995.

## III. PROJECT LOCATION

Missoula is Montana's third largest city with a 1990 urban population of 57,196[8]. Located near the confluence of the Bitterroot and Clark Fork rivers, the city forms the hub of two large valleys. The Clark Fork River flows through the northern third of the city and roughly separates the downtown area from the rest of the city. The California Street non-motorized bridge is located in the north-central part of town, approximately three blocks east of the Russell Street bridge and seven blocks west of the Orange Street bridge (Map 1). This location would provide a critical link between north Missoula (containing the central business district, some industrial development, and residential property) to



Map 1

south Missoula containing mainly residential areas with businesses along most major arterials. The University of Montana is also located south and east of the river along the footslope of Mount Sentinel[5].

The location for the California Street non-motorized bridge was the site of an older bridge constructed during the early 1900's and was used by motor vehicles up to the mid-1950's[6]. The bridge was then closed to motor vehicle traffic upon the completion of the Russell Street bridge in 1957. This bridge continued to service non-motorized traffic until it was permanently closed-off in 1984. In 1986, Missoula County removed the entire bridge structure where today the only remnants are two concrete abutments and a center pier standing in the Clark Fork River[5].

## IV. PROJECT DESCRIPTION

Currently, there are six bridge facilities crossing the Clark Fork River and only one of these, the Van Buren Street bridge, is exclusively for non-motorized travel[5]. The Orange and Russell Street bridges adjacent to the proposed California Street non-motorized bridge site were constructed in 1937 and 1957 respectively. According to the 1990 Missoula Bridge Needs Study, these bridge facilities were rated as 'fair' with some major deficiencies. To accommodate future traffic volumes and non-motorized use, the study suggested the construction of additional bridge facilities at the existing sites. The cost of these alternatives range from 3.17 to 4.80 million dollars[4].

The location for the California Street non-motorized bridge was chosen in part to utilize the existing abandoned bridge abutments. The approaches have been designed to accommodate for the safe entry and departure of non-motorized travellers onto existing transportation facilities. The bridge would be a minimum of ten feet wide and is located in an area that would receive high volumes of use. The design would also include an all-season surface with adequate lighting, signing, railing, and address general maintenance problems[3].

## V. AIR QUALITY BENEFIT CALCULATION

The 1990 Census found that ten percent of Missoula's working population (2,718) used non-motorized transportation as a means to work[8]. The city is estimated to have approximately 5,720 non-motorized transportation users daily (ten percent of 1990 urban population). The ten percent figure is considered conservative for no adjustments are made for the unemployed, adolescent, or retired. This figure is also consistent with the 1992 Downtown Commuter Survey which found that approximately 9.9% of survey respondents bicycled as their primary means to work, while 4.7% walked[1].

An air quality demonstration for the California Street non-motorized bridge project was performed[2] (Appendix 1). Assuming a 1 percent increase in area bicycling due to project construction, this project would eliminate 17 single occupant vehicle (SOV) trips and 77 vehicle miles traveled (VMT) daily, 4,760 SOV trips and 21,560 VMT annually. CO and PM-10 emissions would experience a 3.47 and .011 kilogram daily reduction, 972 and 3.08 kilogram annual reduction respectedly.

## VI. CONCLUSION

The Department of Transportation recommends that the City of Missoula receive matching funds for the California Street non-motorized bridge project through the federal Congestion Mitigation and Air Quality program. This bridge facility clearly exhibits air quality benefits through reductions in total VMT which will likely reduce both CO and PM-10 emissions. The California Street non-motorized bridge has the potential to service large amounts of non-motorized travel movements to and from the central business district and surrounding areas. This bridge would compliment the Van Buren Street non-motorized bridge located east of downtown by catering to non-motorized travel movements west of downtown. This bridge would also alleviate the need for retrofitting travel lanes onto adjacent bridge facilities and would also contribute to the development of an overall non-motorized transportation system in the city of Missoula.

## LITERATURE CITED

1. Bickell, Dale D. 1992. Downtown Missoula Commuter Survey. City of Missoula Bicycle/Pedestrian Program. City publication.

2. Bicycle Spot Improvement Program. Puget Sound Regional Council. n.d. CMAQ Calculations. Photocopied.

3. Missoula Office of Community Development. 1993. Missoula Non-Motorized Transportation Plan. City of Missoula. City publication.

4. Peccia and Assoc., and Stensatter Druyventein & Assoc. 1990. Bridge Needs Study, Missoula, Montana. Missoula Office of Community Development. Peccia and Assoc. publication.

5. Personal Observation. 1993.

6. U.S. Department of Commerce. 1953. Urban Area Traffic Survey, Missoula, Montana. Montana Highway Commission and The City of Missoula. Montana Highways publication.

7. U.S. Department of Commerce. 1990. 1990 Census of Population and Housing Table 2. Bureau of the Census. Photocopied.

8. U.S. Department of Commerce. 1990. 1990 Census of Population and Housing Tape File 3C.

## Appendix 1

## AIR QUALITY BENEFIT CALCULATION
Missoula, Montana

## CALIFORNIA STREET NON-MOTORIZED BRIDGE

(bicycle use only)

ASSUMPTIONS:

EMISSIONS: (Source Montana Department of Health & Environmental Sciences)

1. Temperature for typical day in CO season = 32.1 F
2. Mean Vehicle Speed = 22.4 mph (arterial/CBD)
3. Percent Compliance w/Inspection & Maintenance = n/a
4. Emissions: (grams/VMT)

| CO | PM-10 (Tailpipe) |
|---|---|
| 45.09 | .1466 |

5. The impact of cold-starts are averaged into the emissions; thus the projected reductions due to substituting bicycles for short vehicle trips may be understated.

BICYCLE TRIPS:

1. One vehicle trip is eliminated for every two bicycle commute trips.
2. Current bicycle commuting rate: 9.9% (Source: Bickell, 1992*)
3. Average bicycle commute between 2.44 and 3.25 miles, AVERAGE = 2.85 miles. (Source 1990 Journey to Work)
4. One year has 250 work days (applies only to commute trips)
5. Non-commute utilitarian trips are 70% more frequent than commute trips and are assumed to occur at the same rate 365 days per year.
6. Utilitarian trips are about half the distance of the average bike commute.
7. One in five utilitarian bike trips replaces an automobile trip.

8. Increases in bicycle commuting indicate increased utilitarian cycling as well.

9. Population served by bridge facility: Downtown employees (7,600)* U of M Faculty, staff, and students (12,432)** Total = 20,032
10. Bicycle trips will increase by 1.0% with the addition of this bridge facility.
11. For purposes of comparison, project assumes no change in traffic volume.

DAILY VMT AND EMISSIONS REDUCTIONS: CALIFORNIA STREET NON-MOTORIZED BRIDGE PROJECT

| | Est Pop Served | Number New Trips | Average Round Trip Length (mile) | VMT Avoided | Emissions (grams / VMT) | |
|---|---|---|---|---|---|---|
| | | | | | CO | PM-10 |
| | | | | | 45.09 | .1466 |
| COMMUTE TRIPS | 20,032 | 20 | 5.70 | | (kilograms prevented per day) | |
| SOV Trips Eliminated | | 10 | | 57 | 2.57 | .008 |
| UTILITARIAN TRIPS | | 34 | 2.85 | | | |
| SOV Trips Eliminated | | 7 | | 20 | .902 | .003 |
| TOTAL DAILY REDUCTIONS | | | | | | |
| VMT & Emissions | | 17 (SOV) | | 77 (VMT) | 3.47 | .011 |
| TOTAL ANNUAL REDUCTIONS | | | | | (kilograms prevented per year) | |
| VMT & Emissions (280 days) | | 4,760 (SOV) | | 21,560 (VMT) | 972 | 3.08 |

---

* Bickell, D.D. 1992. Downtown Missoula Commuter Survey.

** U of M Registrar Spring 1994

# AIR QUALITY BENEFIT CALCULATION
Missoula, Montana

## ORANGE STREET NON-MOTORIZED BRIDGE

(Based on factor used for the California Street non-motorized bridge)
(Bicycle use only)

### ASSUMPTIONS:

EMISSIONS: (Source Montana Department of Health & Environmental Sciences)

1. Temperature for typical day in CO season - 32.1 F
2. Mean Vehicle Speed - 22.4 mph (arterial/CBD)
3. Percent Compliance w/Inspection & Maintenance - n/a
4. Emissions: (grams/VMT)

| CO | PM-10 (Tailpipe) |
|---|---|
| 45.09 | .1466 |

5. The impact of cold-starts is averaged into the emissions; thus the projected reductions due to substituting bicycles for short vehicle trips may be understated.

BICYCLE TRIPS:

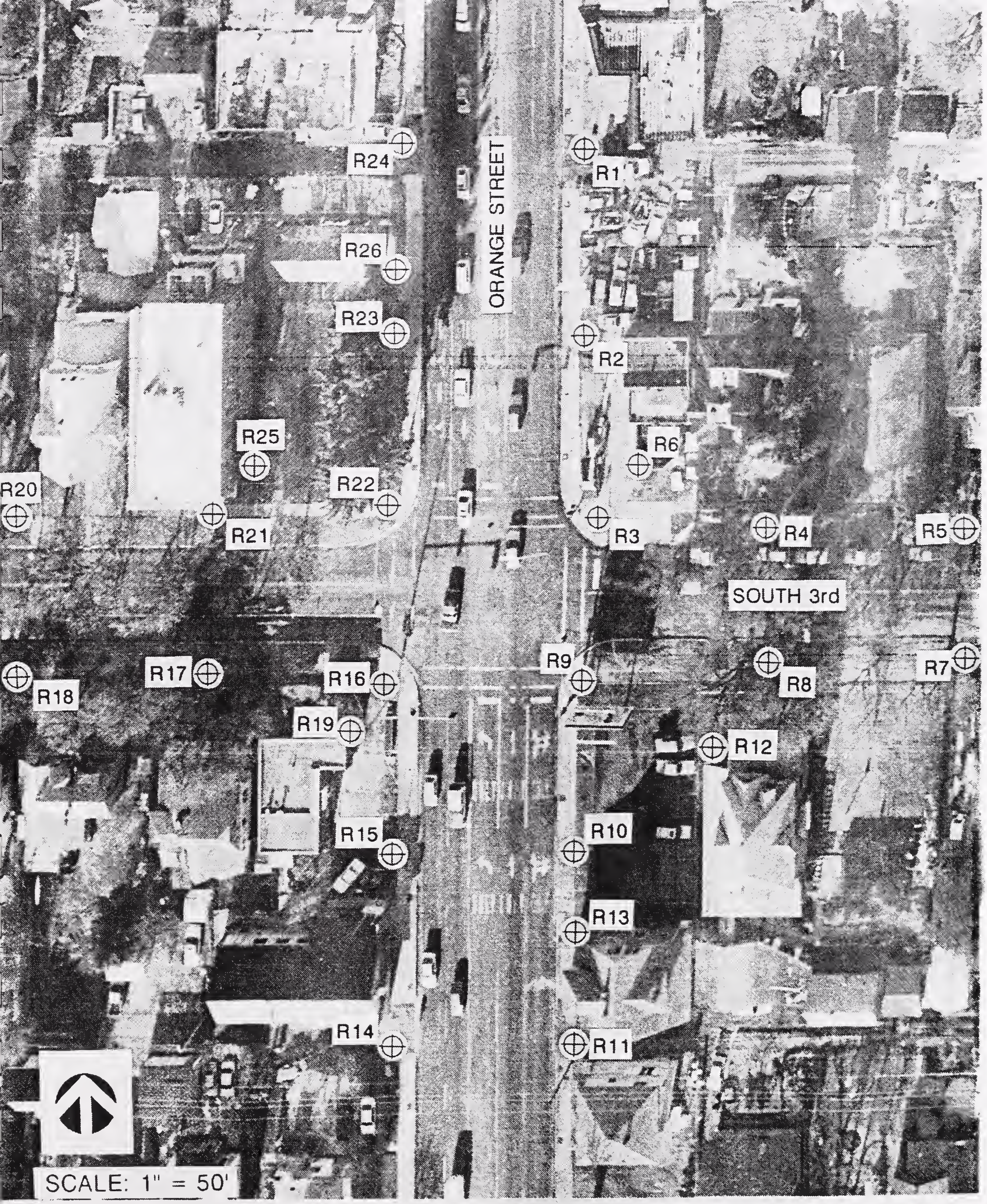
1. One vehicle trip is eliminated for every two bicycle commute trips.
2. Current bicycle commuting rate: 9.9% (Source: Bickell, 1992*)
3. Average bicycle commute between 2.44 an 3.25 miles, AVERAGE = 2.85 miles. Source 1990 Journey to Work)
4. One year has 250 ± work days (applies only to commute trips)
5. Non-commute utilitarian trips are 70% more frequent than commute trips and are assumed to occur at the same rate 365 days per year.
6. Utilitarian trips are about half the distance of the average bike commute.
7. One in five utilitarian bike trips replaces an automobile trip.
8. Increases in bicycle commuting indicate increased utilitarian cycling as well.
9. Population based on California Street calculation.
10. Commuter trips would be one-fourth as shown on California Street calculations.
11. Utilitarian trips would be 2 times those used on California Street calculations.
12. For purposes of comparison, project assumes no change in traffic volume.

### DAILY VMT EMISSIONS REDUCTIONS: CALIFORNIA STREET NON-MOTORIZED BRIDGE PROJECT

| | Number New Trips | Avg. Round Trip Length (mile) | VMT Avoided | Emissions (grams/VMT) | |
|---|---|---|---|---|---|
| | | | | CO<br>45.09 | PM-10<br>.1466 |
| COMMUTE TRIPS | 5 | 5.70 | 17 | (kilograms prevented per day) | |
| SOV Trips Eliminated | 3 | | | 0.77 | .002 |
| UTILITARIAN TRIPS | 68 | 2.85 | 37 | 1.67 | .005 |
| SOV Trips Eliminated | 13 | | | | |
| TOTAL DAILY REDUCTIONS | | | 54 (VMT) | 2.44 | .007 |
| VMT & Emissions | 16 (SOV) | | | | |
| TOTAL ANNUAL REDUCTIONS | | | | (kilograms prevented per year) | |
| VMT & Emissions (280 days) | 4,480<br>(SOV) | | 15,120<br>(VMT) | 683 | 1.96 |

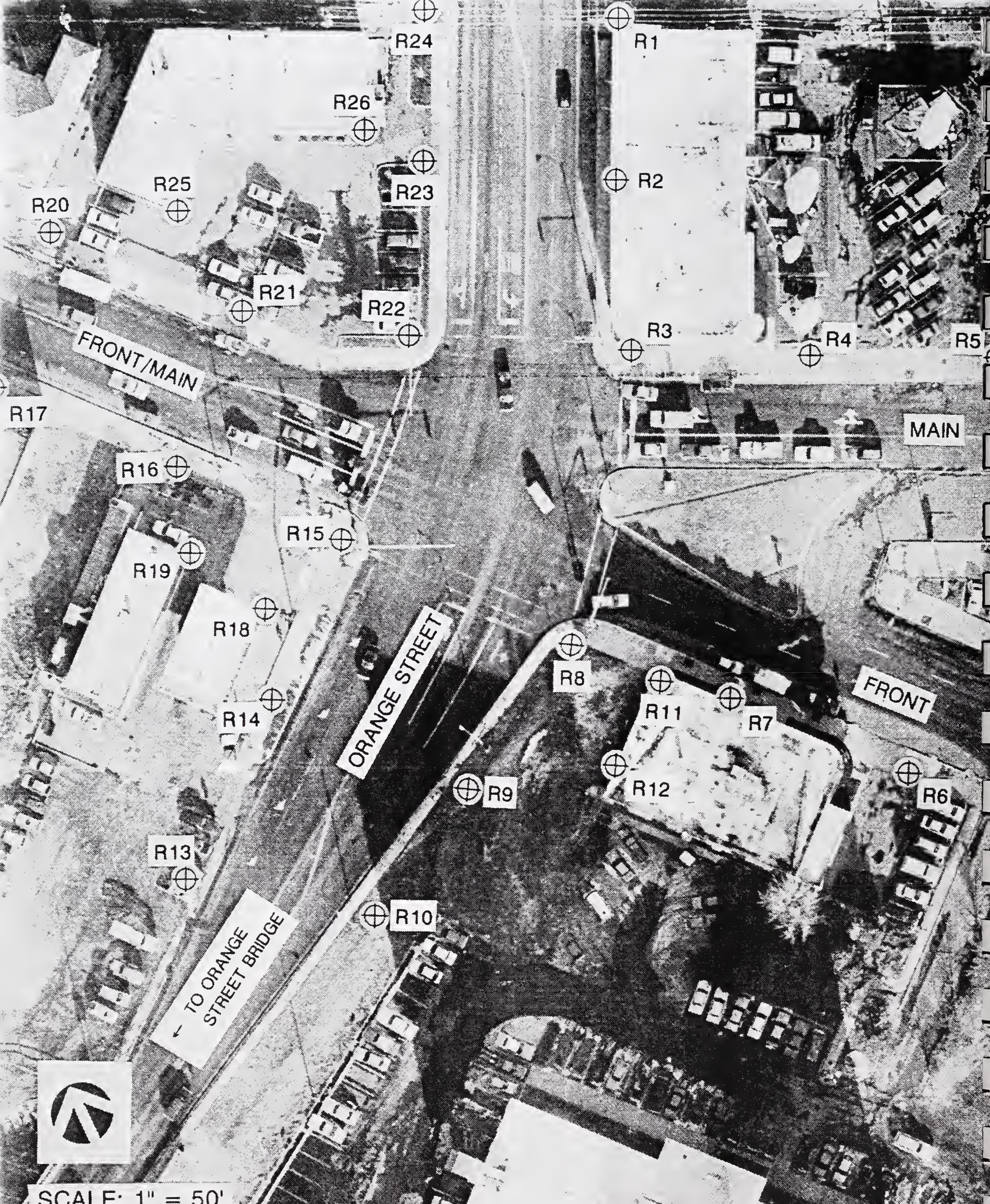
* Bickell, D.D. 1991. Downtown Missoula Commuter Survey.

** U of M Registrar Spring 1994



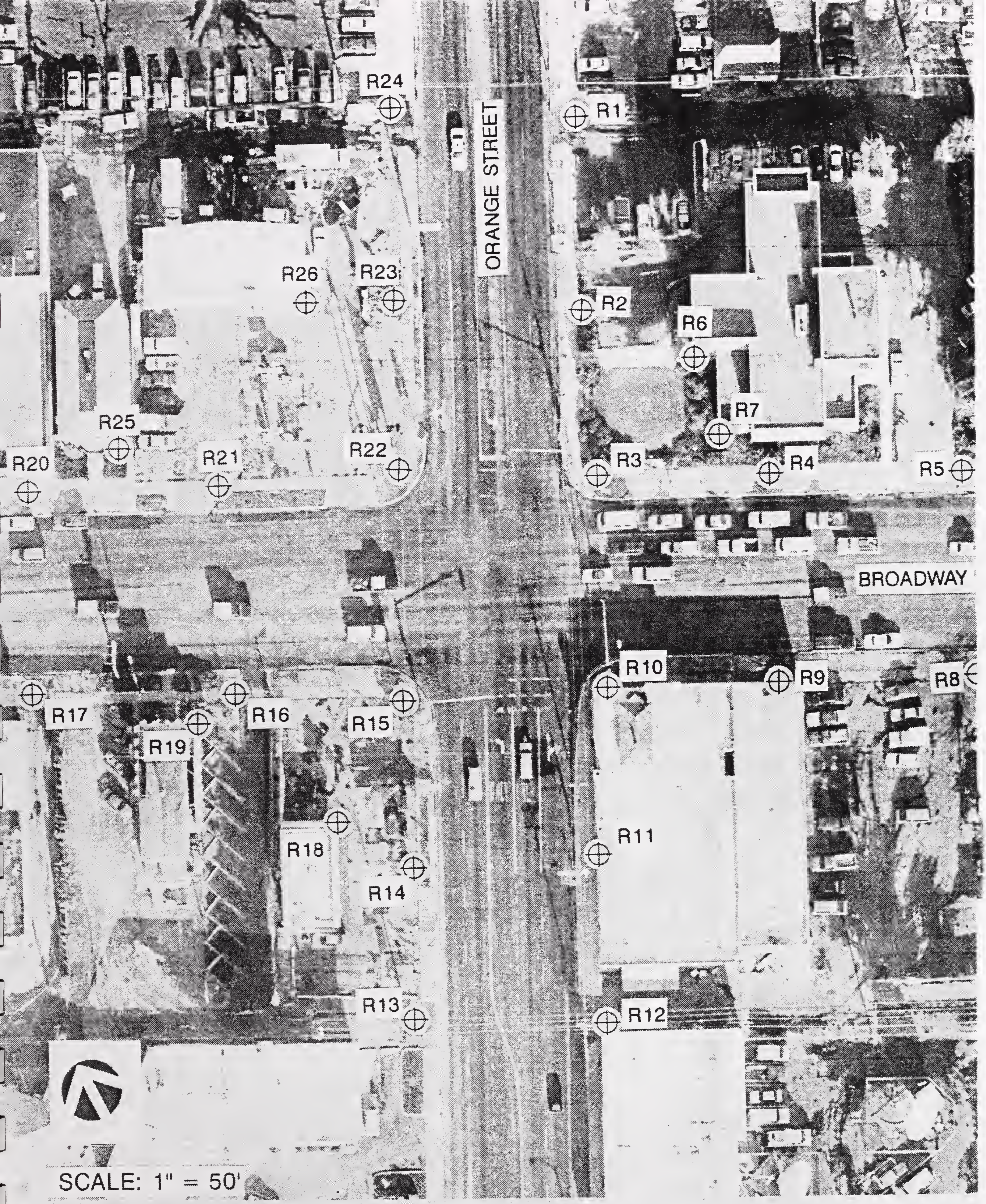
ORANGE STREET BRIDG
AIR QUALITY ANALYSI
RECEPTOR MODELING LOCATION

⊕ R1 AIR QUALITY MODELING RECEPTOR



# ORANGE STREET BRIDGE
# AIR QUALITY ANALYS
# RECEPTOR MODELING LOCATION

⊕ AIR QUALITY
R1 MODELING RECEPTOR



ORANGE STREET BRIDG
AIR QUALITY ANALYSI
RECEPTOR MODELING LOCATION

⊕ R1 AIR QUALITY MODELING RECEPTOR

## SPECIES LIST - MAMMALS

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| American Beaver | Castor canadensis |
| Chipmunk spp. | Eutamias |
| Columbian Ground Squirrel | Spermophilus columbianus |
| Common Raccoon | Procyon lotor |
| Long-tailed Weasel | Mustela frenata |
| Mink | Mustela vison |
| Mule Deer | Odocoileus hemionus |
| Muskrat | Ondatra zibethicus |
| Northern River Otter | Lutra canadensis |
| Striped Skunk | Mephitis mephitis |
| Vole spp. | Microtus |
| White-tailed Deer | Odocoileus virginianus |

## SPECIES LIST - FISH

| | |
|---|---|
| Brook Trout | Salvelinus fontinalis |
| Brown Trout | Salmo trutta |
| Bull Trout | Salvelinus confluentus (Sensitive) |
| Largemouth Bass | Micropterus salmoides |
| Largescale Sucker | Catostomus macrocheilus |
| Longnose Dace | Rhinichthys cataractae |
| Longnose Sucker | Catostomus catostomus |
| Mountain Whitefish | Prosopium williamsoni |
| Northern Pike | Esox lucius |
| Peamouth | Mylocheilus caurinus |
| Rainbow Trout | Onchorhynchus mykiss |
| Redside Shiner | Richardsonius balteatus |
| Slimy Sculpin | Cottus cognatus |
| Squawfish | Ptychocheilus oregonensis |
| Westslope Cutthroat Trout | Onchorhynchus clarki lewisi (Sensitive) |

## SPECIES LIST - BIRDS

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| American Avocet | Recurvirostra americana |
| American (Common) Crow | Corvus brachyrhynchos |
| American Coot | Fulica americana |
| American Robin | Turdus migratorius |
| Bald Eagle | Haliaeetus leucocephalus (Endangered) |
| Barrow's Goldeneye | Bucephala islandica |
| Belted Kingfish | Megaceryle alcyon |
| Black-capped Chickadee | Parus atricapillus |
| Black-crowned Night Heron | Nycticorax nycticorax |
| Bohemian Waxwing | Bombycilla garrulus |
| Canada Goose | Branta canadensis |
| Cedar Waxwing | Bombycilla cedorum |
| Cliff Swallow | Hirundo pyrrhonota |
| Common Goldeneye | Bucephala clangula |
| Common Merganser | Mergus merganser |
| Common Nighthawk | Chordeiles minor |
| Common Raven | Corvus corax |
| Dark-eyed Junco | Junco hyemalis |
| Downy Woodpecker | Picoides pubescens |
| Eastern Kingbird | Tyrannus tyrannus |
| European Starling | Sturnus vulgaris |
| Evening Grosbeak | Hesperiphona vespertina |
| Great Blue Heron | Ardea herodias |
| Greater Yellowlegs | Tringa melanoleuca |
| Green-winged Teal | Anas crecca |
| Gull Spp. | Larus |
| Hairy Woodpecker | Picoides villosus |
| Hooded Merganser | Lophodytes cacullatus |
| House Finch | Carpodacus mexicanus |
| House Sparrow | Passer domesticus |
| Killdeer | Charadrius vociferus |

## SPECIES LIST - FLORA

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| Graminoids | |
| Bluegrass spp. | Poa spp. |
| Green Needlegrass | Stipa viridula |
| Kentucky Bluegrass | Poa pratensis |
| Needle and Thread | Stipa commata |
| Quackgrass | Agropyron repens |
| Smooth Brome | Bromis inermis |
| Western Wheatgrass | Agropyron smithii |
| Wheatgrass | Agropyron caninum |
| Forbs | |
| Bedstraw | Galium boreale |
| Common Tansy | Tanacetum vulgare |
| Dandelion | Taraxacum offinale |
| Field Horsetail | Equisetum arvense |
| Fireweed | Epilobium angustifolium |
| Flannel Mullein | Verbascum thapsus |
| Goatsbeard | Tragopogon dubis |
| Leafy Spurge | Euphorbia esula |
| Mustard spp. | Arabis spp. |
| Nightshade | Solanum dulcamara |
| Pigweed spp. | Amaranthus spp. |
| Spotted Knapweed | Centaurea maculosa |
| Western Virgins Bower | Clematis ligustoifolia |
| White Sweetclover | Melilotus alba |
| Smooth Scouring-rush | Equisetum laevigatum |

## SPECIES LIST - FLORA (cont.)

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| Shrubs | |
| Buffalo Current | Ribes odoratum |
| Common Chokecherry | Prunus virginiana |
| Common Snowberry | Symphoricarpos albus |
| Honeysuckle | Lonicera tatarica |
| Red Dogwood | Cornus stolonifera |
| Rocky Mountain Maple | Acer glabrum |
| Sandbar Willow | Salix exigua |
| Siberian Caragana | Caragana arborescens |
| Trees | |
| Black Cottonwood | Populus trichocarpa |
| Boxelder | Acer negundo |
| Maple spp. | Acer spp. |
| Green Ash | Fraxinus pennsylvanica |
| Water Birch | Betula occidentalis |

United States Department of the Interior

TAKE PRIDE IN AMERICA

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
100 N PARK, SUITE 320
HELENA MT 59601

IN REPLY REFER TO:

MAR - 9 1994

RECEIVED
MAR 7 1994
MISSOULA, MONTANA
CITY ENGINEERING

March 3, 1994

Mr. Joseph L. Aldegarie, Director
Department of Public Works
435 Ryman
Missoula, Montana 59802-4297

Dear Mr. Aldegarie:

This responds to your February 8, 1994 letter, concerning your Orange Street Bridge and Riverfront Access Project in Missoula, which requested identification of the threatened and endangered species that should be considered in connection with this project. Your letter also requested other comments we may have.

The Federally-listed endangered and threatened species which occur or may occur within the project area are the bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrinus*). However, based upon the nature of the proposed work and the locations of the project, we do not expect any project related impacts to threatened or endangered species.

We appreciate your efforts to consider endangered species in your project planning.

Sincerely,

Kemper M. McMaster

Kemper M. McMaster
Field Supervisor
Montana Field Office

cc: Kalispell ES Suboffice
George Chaffee, Natural Resource Services, Box 1559, Eureka, Montana 59917

State Historic Preservation Office
Montana Historical Society
1410 8th Avenue • PO Box 201202 • Helena, MT 59620-1202 • (406) 444-7715 • FAX (406) 444-6575

February 28, 1995

Jon Axline, Historian
Environmental Services
Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, MT 59620-1001

Re: STPU 8107(10)
Clark Fork River (Orange Street) Bridge - Missoula
Control No. 2462 (MO Co)

Dear Jon:

We have received the above referenced determination of effect. We **Concur** that the project would have **No Effect** on site 24MO533, the Fisher House. You also have our **concurrence** that the project would have **No Adverse Effect** on site 24MO532, the Chaffin House and the Missoula South Side Historic District.

Sincerely,

Josef J. Warhank, Historian
Historical Survey Reviewer

File: Comp/ MO Co/ MDT/ 1994

State Historic Preservation Office
Montana Historical Society
1410 8th Avenue • PO Box 201202 • Helena, MT 59620-1202 • (406) 444-7715 • FAX (406) 444-6575

ECEIVED
JAN 05 1995

MASTER FILE COPY

cc: Jim Weave

January 3, 1995

Jon Axline
Environmental Services
Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, MT 59620-1001

Re: STPU 8107(10)
Orange Street Bridge
Control No. 2462, MO Co

Dear Jon:

We have received the above referenced cultural resource report. The inventory looks good, and we will add it to our CRABS material. **We concur that sites 24MO532 and 24MO533 are eligible for the NRHP. We also concur that sites 24MO545 and 24MO544 are covered under the PA,** and we concur that the other properties mentioned in your letter may not be eligible.

The proximity of the project area to the Missoula south side historic district is important to consider. Such an alignment may threaten an impact on the historic district, particularly 3 properties in that immediate vicinity: 201, 205 and 207 Chestnut Street. The properties at 201 and 205 Chestnut are primary contributors within the south side district, for their architectural values, associations with neighborhood settlement and railroad development, and the high degree of integrity of the neighborhood. We note that any encroachment of this project along the rear of these properties would threaten a small historic orchard and outbuildings at 201 Chestnut, as well as posing significant visual and environmental impact to the character, feeling and setting of these important resources.

With these concerns in mind, we recommend that you carefully consider possible direct and indirect effects in this area, and consult again with us once more specific final plans are in hand.

Sincerely,

Josef J. Warhank, Historian
Historical Survey Reviewer

File: Comp/ Missoula Co/ MDT/ 1994

U.S. Department
of Transportation
Federal Highway
Administration

Montana Division
301 South Park Street, Room 448
Drawer 10056
Helena, Montana 59626-0056

March 13, 1995

cc: Jon Axline

MAR 20

RECEIVED
JAN 25 1996

CONCUR
APR 11 1995
Advisory Council
on
Historic Preservation
Director, Western O

Claudia Nissley, Director
Advisory Council on Historic Preservation
730 Simms Street, Suite 450
Golden, CO 80401

Subject: STPU 8107 (10)
Clark Fork River (Orange Street)Bridge - Missoula
Control No. 2462

Dear Mrs. Nissley:

Enclosed is the Determination of Effect and SHPO correspondence for the above project. The Montana SHPO has determined that the proposed project would have **No Adverse Effect** to the Chaffin House (24MO532) and the Missoula East Side Historic District in Missoula County, Montana; we request your concurrence.

If you have any questions, please contact Jon Axline at the Montana Department of Transportation. He can be reached at (406) 444-6258.

Sincerely,

Dale W. Paulson
Environmental Coordinator

Enclosures

cc:
MDT - Jon Axline
Marcella Sherfy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

MAR 11 199

Ref: 8P2-W-GW

March 8, 1996

Mr. Joel Marshik, P.E., Manager
Environmental Services
Montana Department of Transportation
2701 Prospect Avenue
Helena, Montana 59620-1001

Attention: Mr. Joel Marshik, P.E., Manager
Environmental Services
Montana Department of Transportation

Mr. Vaughn Anderson, P.E.,
Druyvestein, Johnson, and Anderson

Dear Sirs:

This is to notify you that under provisions of the Safe Drinking Water Act, Section 1424 (e), Sole Source Aquifer Designation, we have reviewed the project know as the Orange Street Bridge and Riverfront Access Project (STPU 8107(10)). Our review has found nothing that we consider to be an undue threat to the sole source of drinking water in the Missoula Valley.

I would however, like to confirm that this project has been reviewed by the Missoula County/City County Health Department, Environmental Health Division for compliance with their standards.

Please confirm with us, your discussions with the Environmental Health Division. If you have any questions or need further clarification, please feel free to call (303) 312-6619.

I would like to thank your office for their cooperation in this matter.

Sincerely,

William J Monheiser

William J. Monheiser
Regional Sole Source
Aquifer Coordinator

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MISSOULA
COUNTY

MISSOULA CITY-COUNTY HEALTH DEPARTMENT
MISSOULA VALLEY WATER QUALITY DISTRICT
301 W ALDER ST
MISSOULA, MONTANA 59802-4123

PHONE (406) 523-4890 FAX (406) 523-4781

MAR 25 199

March 22, 1996

Mr. Joel Marshik, P.E., Manager
Environmental Services
Montana Department of Transportation
2701 Prospect Ave.
Helena MT 59620

Attention: Mr. Joel Marshik, P.E., Manager
Environmental Services
Department of Transportation

Mr. Vaughn Anderson, P.E.
Druyvestein, Johnson and Anderson

Dear Sirs,

Mr. Vaughn Anderson contacted me yesterday regarding the Orange Street Bridge and Riverfront Access Project. Our department was previously contacted by phone by Mr. Bill Monheiser, of the U.S. Environmental Protection agency, regarding the impacts of this project on the Missoula Sole Source Aquifer. We have not been provided with plans for the project by your department or EPA.

As I discussed with Mr. Anderson yesterday, we are concerned about the discharge of storm drainage from this project directly into the Clark Fork River. The bridge will receive heavy applications of liquid deicer, which contains a significant amount of phosphorous and other contaminants, including metals such as copper and arsenic. Stormwater on the bridge also contains the typical contaminants associated with heavily travelled roadways, including lead and petroleum hydrocarbons. The Clark Fork River has been documented to be impacted by pollutants such as phosphorus, lead and copper from other contaminant sources. Additional sources of such contaminants are of significant concern for the quality of the river. The proposed drainage method for this bridge involves direct discharge of these contaminants into the Clark Fork River. As I indicated in our phone conversation yesterday, our department does not approve of this form of storm water discharge and would like to work with you to develop an alternative method of stormwater treatment and disposal for this project.

We would appreciate your investigating the feasibility of alternative methods of stormwater drainage, treatment and disposal for this project, and discussing your finding with us before finalizing the design of this project. As part of this review, I would recommend that you consider the drainage alternatives we discussed on the phone yesterday. These include drainage of the bridge by gutters, and drainage into open pipes suspended under the bridge. Treatment and disposal of stormwater from the bridge could be accommodated in grass-lined infiltration swales with properly constructed injection wells to accommodate very high flows.

Thank you for considering these comments. I apologize for commenting at such a late date in your design process. In the future it would be helpful to consult with our department at an earlier stage in the process.

Sincerely,

Peter Nielsen

Peter Nielsen
Environmental Health Supervisor

cc: Bill Monheiser, EPA
Gary Ingman, Montana Department Environmental Quality

## SPECIES LIST - MAMMALS

| COMMON NAME | GENUS AND SPECIES | |
|---|---|---|
| American Beaver | Castor canadensis | |
| Chipmunk spp. | Eutamias | |
| Columbian Ground Squirrel | Spermophilus columbianus | |
| Common Racoon | Procyon lotor | |
| Long-tailed Weasel | Mustela frenata | |
| Mink | Mustela vison | |
| Mule Deer | Odocoileus hemionus | |
| Muskrat | Ondatra zibethicus | |
| Northern River Otter | Lutra canadensis | |
| Striped Skunk | Mephitis mephitis | |
| Vole spp. | Microtus | |
| White-tailed Deer | Odocoileus virginianus | |

## SPECIES LIST - FISH

| | | |
|---|---|---|
| Brook Trout | Salvelinus fontinalis | |
| Brown Trout | Salmo trutta | |
| Bull Trout | Salvelinus confluentus | (Sensitive) |
| Largemouth Bass | Micropterus salmoides | |
| Largescale Sucker | Catostomus macrocheilus | |
| Longnose Dace | Rhinichthys cataractae | |
| Longnose Sucker | Catostomus catostomus | |
| Mountain Whitefish | Prosopium williamsoni | |
| Northern Pike | Esox lucius | |
| Peamouth | Mylocheilus caurinus | |
| Rainbow Trout | Onchorhynchus mykiss | |
| Redside Shiner | Richardsonius balteatus | |
| Slimy Sculpin | Cottus cognatus | |
| Squawfish | Ptychocheilus oregonensis | |
| Westslope Cutthroat Trout | Onchorhynchus clarki lewisi | (Sensitive) |

## SPECIES LIST - BIRDS

| COMMON NAME | GENUS AND SPECIES | |
|---|---|---|
| American Avocet | Recurvirostra americana | |
| American (Common) Crow | Corvus brachyrhynchos | |
| American Coot | Fulica americana | |
| American Robin | Turdus migratorius | |
| Bald Eagle | Haliaeetus leucocephalus | (Endangered) |
| Barrow's Goldeneye | Bucephala islandica | |
| Belted Kingfish | Megaceryle alcyon | |
| Black-capped Chickadee | Parus atricapillus | |
| Black-crowned Night Heron | Nycticorax nycticorax | |
| Bohemian Waxwing | Bombycilla garrulus | |
| Canada Goose | Branta canadensis | |
| Cedar Waxwing | Bombycilla cedorum | |
| Cliff Swallow | Hirundo pyrrhonota | |
| Common Goldeneye | Bucephala clangula | |
| Common Merganser | Mergus merganser | |
| Common Nighthawk | Chordeiles minor | |
| Common Raven | Corvus corax | |
| Dark-eyed Junco | Junco hyemalis | |
| Downy Woodpecker | Picoides pubescens | |
| Eastern Kingbird | Tyrannus tyrannus | |
| European Starling | Sturnus vulgaris | |
| Evening Grosbeak | Hesperiphona vespertina | |
| Great Blue Heron | Ardea herodias | |
| Greater Yellowlegs | Tringa melanoleuca | |
| Green-winged Teal | Anas crecca | |
| Gull Spp. | Larus | |
| Hairy Woodpecker | Picoides villosus | |
| Hooded Merganser | Lophodytes cacullatus | |
| House Finch | Carpodacus mexicanus | |
| House Sparrow | Passer domesticus | |
| Killdeer | Charadrius vociferus | |

SPECIES LIST - BIRDS (cont.)

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| Lesser Yellowlegs | Tringa flavipes |
| Mallard | Anas platyrhynchos |
| Mourning Dove | Zenaida macroura |
| Northern (Gray) Catbird | Dumetella carolinensis |
| Northern (Common) Flicker | Colaptes auratus |
| Northern Oriole | Icterus galbula |
| Northern Saw-whet Owl | Aegolius acadicus |
| Osprey | Pandion haliaetus |
| Pileated Woodpecker | Dryocopus pileatus |
| Pine Siskin | Carduelis pinus |
| Red-breasted Nuthatch | Sitta canadensis |
| Red-necked Grebe | Podiceps grisegena |
| Red-winged Blackbird | Agelaius phoeniceus |
| Rock Dove | Columba livia |
| Ruby-crowned Kinglet | Regulus calendula |
| Sharp-shinned Hawk | Accipiter striatus |
| Song Sparrow | Melospiza melodia |
| Snow Goose | Chen caerulescens |
| Spotted Sandpiper | Actitis macularia |
| Tennessee Warbler | Vermivora peregrina |
| Townsend's Solitaire | Myadestes townsendi |
| Tree Swallow | Tachycineta bicolor |
| Violet-green Swallow | Tachycineta thalassina |
| Warbling Vireo | Vireo gilvus |
| Western Wood-Pewee | Contopus sordidulus |
| White-crowned Sparrow | Zonotrichia Leucophrys |
| White-throated Sparrow | Zonotrichia albicollis |
| Wilson's Warbler | Wilsonia pusilla |
| Yellow Warbler | Dendroica petechia |
| Yellow-rumped Warbler | Dendroica coronata |

①

Current Bird list for islands between Higgins and Orange St. bridges + Open Space and Banks

1. Red-necked Grebe
2. Great Blue Heron
3. Black-crowned Night Heron
4. Snow Goose
5. Green-winged Teal
6. Mallard
7. Common Goldeneye
8. Barrow's Goldeneye
9. Common Merganser
10. Canada Goose
11. Osprey
12. Bald Eagle
13. Sharp-shinned Hawk
14. American Coot
15. Killdeer •
16. American Avocet
17. Greater Yellowlegs
18. Lesser Yellowlegs
19. Spotted Sandpiper
20. Rock Dove
21. Mourning Dove
22. Northern Saw-whet
23. Common Nighthawk
24. Belted Kingfisher
25. Downy Woodpecker
26. Northern Flicker
27. Hairy Woodpecker
28. Pileated Woodpecker
29. Western Wood-Pewee •
30. Eastern Kingbird
31. Tree Swallow •
32. Violet-green Swallow •
33. Cliff Swallow
34. Common Crow
35. Common Raven
36. Black-capped Chickadee
37. Ruby-crowned Kinglet
38. Townsend's Solitaire
39. American Robin
40. Northern Catbird •
41. Bohemian Waxwing
42. Cedar Waxwing •
43. Nashville Warbler
44. Yellow Warbler
45. Yellow-rumped Warbler
46. Wilson's Warbler
47. White-throated Sparrow
48. White-crowned Sparrow
49. Dark-eyed Junco
50. Song Sparrow
51. Red-winged Blackbird
52. Northern Oriole •
53. House Finch
54. Pine Siskin
55. Evening Grosbeak
56. House Sparrow
57. Warbling Vireo •
58. European Starling
59. American Tree Sparrow
60. Hooded Merganser
61. Cinnamon Teal
62. Bufflehead
63. Vaux's Swift •
64. Brewer's Blackbirds
65. Swainson's Thrush
66. Brown-headed Cowbird
67. Rufous Hummingbird
68. Common Yellowthroat
69. American Goldfinch
70. Barn Swallow
71. Northern Rough-winged Swallow
72. Northern Waterthrush
73. MacGillivray's Warbler
74. Empidonax Flycatcher (Specific spp. ?) 5/26/94
75. Olive-sided Flycatcher
76. Lincoln's Sparrow
77. American Redstart
78. Black-headed Grosbeak •
79. Western Tanager
80. Western Bluebird
81. Blue-winged Teal
82. Lazuli Bunting
83. Red-eyed Vireo •
84. Gull spp. ???

LIST RECEIVED 9/12/94
FROM WILL KERLING,
LOCAL WILDLIFE OBSERVER

## SPECIES LIST - FLORA

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| Graminoids | |
| Bluegrass spp. | Poa spp. |
| Green Needlegrass | Stipa viridula |
| Kentucky Bluegrass | Poa pratensis |
| Needle and Thread | Stipa commata |
| Quackgrass | Agropyron repens |
| Smooth Brome | Bromis inermis |
| Western Wheatgrass | Agropyron smithii |
| Wheatgrass | Agropyron caninum |
| Forbs | |
| Bedstraw | Galium boreale |
| Common Tansy | Tanacetum vulgare |
| Dandelion | Taraxacum offinale |
| Field Horsetail | Equisetum arvense |
| Fireweed | Epilobium angustifolium |
| Flannel Mullein | Verbascum thapsus |
| Goatsbeard | Tragopogon dubis |
| Leafy Spurge | Euphorbia esula |
| Mustard spp. | Arabis spp. |
| Nightshade | Solanum dulcamara |
| Pigweed spp. | Amaranthus spp. |
| Spotted Knapweed | Centaurea maculosa |
| Western Virgins Bower | Clematis ligustoifolia |
| White Sweetclover | Melilotus alba |
| Smooth Scouring-rush | Equisetum laevigatum |

## SPECIES LIST - FLORA (cont.)

| COMMON NAME | GENUS AND SPECIES |
|---|---|
| Shrubs | |
| Buffalo Current | Ribes odoratum |
| Common Chokecherry | Prunus virginiana |
| Common Snowberry | Symphoricarpos albus |
| Honeysuckle | Lonicera tatarica |
| Red Dogwood | Cornus stolonifera |
| Rocky Mountain Maple | Acer glabrum |
| Sandbar Willow | Salix exigua |
| Siberian Caragana | Caragana arborescens |
| Trees | |
| Black Cottonwood | Populus trichocarpa |
| Boxelder | Acer negundo |
| Maple spp. | Acer spp. |
| Green Ash | Fraxinus pennsylvanica |
| Water Birch | Betula occidentalis |

# APPENDIX 2

*(THE FOLLOWING ITEMS ARE REFERRED TO IN THE ENVIRONMENTAL ASSESSMENT TEXT IN SECTION 4.20 SECTION 4(f)/6(f) IMPACTS)*

May 9, 1989

# PROGRAMMATIC AGREEMENT

Among the Federal Highway Administration (FHWA), the Montana State Historic Preservation Office (MSHPO), and the Advisory Council on Historic Preservation (ACHP), to develop a historic preservation plan to establish processes for integrating the preservation and use of historic roads and bridges with the mission and programs of the FHWA in a manner appropriate to the nature of the historic properties involved, the nature of the roads and bridges in Montana, and the nature of FHWA's mission to provide safe, durable and economical transportation.

WHEREAS, Congress has mandated that highway bridges be evaluated, and where found substandard, be rehabilitated or replaced and has provided funding for these purposes, to insure the safety of the traveling public (through the Highway Bridge Replacement and Rehabilitation Program); and

WHEREAS, the American Association of State Highway and Transportation Officials (AASHTO) has standards regulating the construction and the rehabilitation of highways and bridges that must be met by the FHWA to insure the safety of the traveling public; and

WHEREAS, Congress declares it to be in the national interest to encourage the rehabilitation, reuse and preservation of bridges significant in American history, architecture, engineering and culture; and

WHEREAS, the FHWA proposes to make Federal funding available to the Montana Department of Highways (MDOH) for its ongoing program to construct and rehabilitate roads and bridges, and MDOH concurs in and accepts responsibilities for compliance with this Agreement; and

WHEREAS, the FHWA has determined that the construction and improvement of highways may have an effect on historic roads and bridges that are listed in the National Register of Historic Places, or may be determined eligible for listing, and have consulted with the ACHP and the MSHPO pursuant to Section 800.13 of the regulations (36CFR800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the parties understand that not all historic roads and bridges fall under the jurisdiction or sphere of influence of the FHWA, and that to encourage other parties to participate in preservation efforts; an education to foster a preservation ethic is needed; and

NOW THEREFORE, FHWA, MSHPO, and ACHP agree, and MDOH concurs, that the following program to enhance the preservation potential of historic roads and bridges, and to promote management and public understanding of and appreciation for these cultural resources will be enacted in lieu of regular Section 106 procedures as applied to historic roads and bridges only.

## Stipulations

The Federal Highway Administration will ensure that the following program is carried out:

The Federal Highway Administration, in cooperation with the Montana Department of Highways, will develop a preservation plan to ensure the preservation and rehabilitation of the states significant historic roads and bridges, and will develop an on-going educational program to interpret significant historic roads and bridges that illustrate the engineering, economic, and political development of roads in Montana. Specifically:

A. For Public Education

1. MDOH will prepare technical documentation of the history of roads and road construction, and of the history of bridge building in the state, according to a format developed by MDOH in consultation with the MSHPO and in compliance with the Secretary of the Interior's Standards for Preservation Planning. From this documentation MDOH will prepare narrative histories suitable for publication for the general public. Draft copies of the documentation and the narrative histories will be submitted to the FHWA, MSHPO and a list of qualified reviewers to be determined by FHWA, MDOH and MSHPO by December 1, 1990, and 45 days will be allowed for reviewers to comment. MDOH will prepare final documentation and histories by May 1, 1991. Final copies will be distributed to the district, area, and field offices of the MDOH, to the County Commissioners, county road and bridge departments, and county historical societies, to the owners of significant roads and bridges identified in the documentation, to the Montana Historical Society Library and the Montana State Library, and to the general public as requested.

2. MDOH will develop and make available to newspapers and publishers of historical and of engineering journals articles suitable for public information on historic roads and bridges and on their construction and continued significance.

3. MDOH will augment its historic sign program by developing interpretation for the traveling public at existing rest areas or pull-overs to explain Montana's road construction and bridge engineering. It will develop on-site interpretation for significant resources that can be viewed and appreciated by the public.

4. By April 15, 1990 MDOH will develop and circulate a traveling exhibit that portrays the history of the development of transportation in Montana.

5. By December 1, 1991 MDOH will develop and circulate a public program (slide/tape or video) of approximately 20 minutes, suitable for use at public or organization gatherings, classrooms, etc.

B. For Historic Road and Bridge Preservation

1. The FHWA, in co-operation with the MDOH, will prepare a plan for the preservation of significant and representative road segments and bridge types around the state as identified in the research in part A. of this Agreement. The Historic Preservation Plan (HPP) will be presented to the FHWA, MSHPO, the ACHP and list of qualified reviewers by September 1, 1991, and 45 days comment period will be

cc

# Amendment To The Programmatic Agreement Regarding Historic Roads and Bridges In Montana.

We are hereby amending the following stipulations in the Programmatic Agreement.

A. For Public Education

1. In the third sentence December 1, 1990 becomes December 1, 1992. In the fourth sentence, May 1, 1991 becomes May 1, 1993.

5. December 1, 1991 becomes December 1, 1993.

B. For Historic Road and Bridge Preservation

1. September 1, 1991 becomes September 1, 1993 and December 1, 1991 becomes December 1, 1993.

By: Federal Highway Administration

for D C Lewis DATE 02-27-92
Hank Honeywell, Division Administrator

By: Montana State Historic Preservation Officer

Marcella Sherfy DATE 2-27-92
Marcella Sherfy, Montana State Historic Preservation Officer

By: Advisory Council On Historic Preservation

Robert D. Bush DATE 3-16-92
Robert D. Bush, Executive Director

By: Montana Department of Transportation

Edrie Vinson DATE Feb 25, 199
Edrie Vinson, Environmental and Hazardous Waste Bureau

5. During any resolution of disagreements on the PA, and/or in the event MDOH does not carry out the terms of the PA, FHWA will carry out the procedures outlined in 36 CFR 800 for all undertakings otherwise covered by the agreement.

Execution of this PA evidences that FHWA has afforded the ACHP a reasonable opportunity to comment on FHWA's program to construct and improve Montana highways when those undertakings affect historic roads and bridges, and that FHWA has taken into account the effects of these undertakings on significant historic roads and bridges.

BY: FEDERAL HIGHWAY ADMINISTRATION

Roger K. Scott

Roger K. Scott
Division Administrator

5-11-89
Date

BY: MONTANA STATE HISTORIC PRESERVATION OFFICER

Marcella Sherfy

Marcella Sherfy, MSHPO

5-11-89
Date

BY: ADVISORY COUNCIL ON HISTORIC PRESERVATION

Robert D. Bush

Executive Director

6-1-89
Date

CONCUR
BY: MONTANA DEPARTMENT OF HIGHWAYS

Stephen C. Kologi

Stephen Kologi, P.E., Chief
Preconstruction Bureau

May 11, 1989
Date

EV:1:by:cm:255/cc-5

allowed for discussion and adoption. FHWA will work to resolve disagreement on the proposed HPP. If agreement cannot be reached by December 1, 1991, all FHWA undertakings affecting historic roads and bridges will again become subject to 36 CFR 800 procedures.

The HPP for historic roads and bridges shall be prepared in accordance with the following guidelines:

a. The essential purpose of the HPP will be to establish processes for integrating the preservation and use of historic roads and bridges with the mission and programs of the FHWA and the MDOH in a manner appropriate to the nature of the historic properties involved, the nature of the roads and bridges in Montana, and the nature of FHWA's mission, to provide safe, durable and economical transportation;

b. In order to facilitate such integration, the HPP, including all maps and graphics, will be made consistent with the Federal Aid road and bridge numbering systems;

c. The HPP will be prepared in consultation with the owners, managers, caretakers, or administrators of historic roads and bridges, including county governments, city governments, federal agencies, and private individuals or corporations, and with interested parties or organizations, including the American Society of Civil Engineers - Montana Section, and the Montana Society of Engineers;

d. The HPP will be prepared with reference to the Secretary of Interior's Standards and Guidelines for Preservation Planning (48 FR 44716-20); and

e. The HPP will be prepared by or under the supervision of an individual who meets, or individuals who meet, at a minimum, the "professional qualifications standards" for historian and archaeologist in the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9).

2. The contents of the HPP will be developed in conjunction with the MSHPO, and will include, but not be limited to, a schedule for the anticipated implementation of the various elements, plus the formulation and presentation of programs to:

   a. Preserve historic bridges that do not meet safety rating standards by rehabilitation in a manner that would preserve important historic features while meeting as many AASHTO standards as can be reasonably met;

   b. When a historic bridge must be replaced, give full consideration and demolition savings to reuse of the historic bridge in place by another party.

   c. When a historic bridge must be replaced and in place preservation is not feasible, give full consideration and financial assistance to relocating and rehabilitating the historic bridge as a part of the replacement project;

   d. Develop and implement a program to encourage relocation and reuse of bridges of historic age that cannot be preserved in place or used on another location by the state or county;

   e. Provide a financial incentive by offering demolition savings on all relocation and reuse of bridges of historic age;

   f. Develop a list of historic roads and bridges that can be preserved. The list should include the variety available to reflect Montana highway construction history, while considering current condition and use. The list should be presented to and discussed with managing units to solicit their cooperation and/or participation in the preparation of the HPP; and

   g. Devise a program to pursue the preservation of the state's representative and outstanding examples of road and bridge technology. A list of historic roads and bridges that shall be preserved will be developed to implement this program, given currently known commitments to do so by property managers and subject to change by obtaining future commitments for other properties covered by this Agreement.

3. The HPP will not include information developed in Part A. above, narrative histories, but will be guided by and used in conjunction with Part A. above, and will be distributed to the same parties.

4. MDOH will prepare a report annually on its implementation of the HPP, and provide this report to the FHWA, the SHPO, and the ACHP for review, comment, and consultation as needed.

C. Other Legal and Administrative Concerns

1. FHWA will continue to inventory, evaluate, seek determinations of eligibility, and fully comply with 36 CFR 800 for all undertakings with the potential to affect historic properties besides roads and bridges which are hereby excluded from such consideration.

2. The MSHPO, and the ACHP may monitor FHWA and MDOH activities to carry out this PA, by notifying FHWA in writing of their concerns and requesting such information as necessary to permit either or both MSHPO and ACHP to monitor the compliance with the terms of this Agreement. FHWA will cooperate with the SHPO, and the ACHP in carrying out their monitoring and review responsibilities.

3. FHWA will carry out the existing MOA's to preserve or record historic bridges that are now scheduled for replacement.

4. If a dispute arises regarding implementation of this PA, FHWA will consult with the objecting party to resolve the dispute. If any consulting party determines that the dispute cannot be resolved, FHWA will request further comments of the ACHP.

# PROGRAMMATIC AGREEMENT
# AMONG
# THE FEDERAL HIGHWAY ADMINISTRATION,
# THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
# AND THE MONTANA STATE HISTORIC PRESERVATION OFFICER
# REGARDING THE TREATMENT OF HISTORIC IRRIGATION DITCHES
# AFFECTED BY HIGHWAY CONSTRUCTION IN MONTANA

WHEREAS, the Federal Highway Administration, Montana Division (FHWA), proposes to make Federal funding available to the Montana Department of Highways (MDOH) for that agency's ongoing program to construct or rehabilitate highways, and

WHEREAS, the FHWA has determined that this federally-assisted program may have an effect upon a certain class of properties included in or eligible for inclusion in the National Register of Historic Places and has consulted with the Advisory Council on Historic Preservation (Council) and the Montana State Historic Preservation Officer (SHPO) pursuant to Section 800.13 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the Montana Department of Highways (MDOH) participated in the consultation and has been invited to concur in this Programmatic Agreement;

NOW THEREFORE, the FHWA, the Council, and the Montana SHPO agree that the program addressed in this Programmatic Agreement shall be administered in accordance with the following stipulations to satisfy the FHWA's Section 106 responsibility for all individual undertakings of the program.

## Stipulations

The FHWA will ensure that the following measures are carried out:

General Notes:

A) The term "Irrigation Ditches" applies to irrigation ditches and ancillary structures such as, but not limited to, concrete ditch linings, intake headgates, overflow structures, flumes and siphons.

B) The procedures in this Programmatic Agreement will be following without regard to the ownership or length of the irrigation ditches addressed in this Agreement.

1) MDOH will assist the FHWA in meeting the compliance requirements of 36 CFR Section 800.4 through 800.6, as applicable, for those highway construction projects affecting irrigation ditch-related structures that are 50 years or older. For the purpose of this Programmatic Agreement, structures associated with existing roads and built as part of the roadway, such as metal or concrete culverts, will be considered to be features of the roadway and not of an intersecting irrigation system.

2) MDOH will assist the FHWA in meeting the compliance requirements of 36 CFR Section 800.4 through 800.6, as applicable, when the affected irrigation ditch has been abandoned, i.e., is no longer operational and operated. In such circumstances, the requirements of Section 106, as implemented by 36 CFR Part 800, will be met whether or not ditch-related structures will be impacted.

3) MDOH will assist the FHWA in meeting the compliance requirements of Section 106 of the Act, as implemented by 36 CFR Part 800, for those projects affecting irrigation ditches and associated structures, if any, previously listed on or determined eligible for inclusion in the National Register of Historic Places.

4) When operational irrigation ditches without structures in the construction-impact area will be re-channeled during highway construction, MDOH will comply with the following procedures:

   a) Simplified inventory forms employing a format approved by the SHPO will be used to describe the feature. The forms will provide an assigned Smithsonian site number, the ditch's name, legal description, a history and map of the ditch taken from the appropriate Montana Water Resources Survey publication or other readily available published source and MDOH's assigned project name and number.

   b) Such ditches will not be evaluated against the criteria of the National Register of Historic Places.

   c) It is understood that determinations of effect, alternative project designs to avoid impact or mitigation of effect (other than continued ditch operation) will not be done by MDOH or FHWA.

   d) Irrigation ditches not identified by name in the appropriate Montana Water Resources Survey publication will not be considered under any circumstances.

5) The Council and the SHPO may monitor activities carried out pursuant to this Programmatic Agreement, and the Council will review such activities if so requested by a signatory to this Agreement or by a member of the public. FHWA will cooperate with the Council and the SHPO in carrying out their monitoring and review responsibilities.

6) Any party to this Programmatic Agreement may request that it be amended, whereupon the parties will consult in accordance with 36 CFR Part 800.13 to consider such amendment.

7) Any party to this Programmatic Agreement may terminate it by providing, in writing, forty-five (45) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, FHWA will comply with 36 CFR Part 800.4 through 800.6 with regard to individual undertakings covered by this Programmatic Agreement.

8) If a dispute arises regarding implementation of this Programmatic Agreement, FHWA will consult with the objecting party to resolve the dispute. If any consulting party determines that the dispute cannot be resolved, FHWA will request the further comments of the Council pursuant to 36 CFR Part 800.6(b). Any council comment provided in response to such a request will be taken into account by the FHWA in accordance with 36 CFR §800.6(c)(2) with reference only to the subject of the dispute; the FHWA's and MDOH's responsibilities to carry out all actions under this Programmatic Agreement that are not the subjects of the dispute will remain unchanged.

9) In the event that the FHWA does not carry out the terms of this Programmatic Agreement, the FHWA will comply with 36 CFR Sections 800.4 through 800.6 with regard to individual undertakings covered by this Programmatic Agreement.

Execution and implementation of this Programmatic Agreement evidences that the FHWA has satisfied its Section 106 responsibilities for all individual undertakings of the program.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: Robert D. Bush Date: 3-15-91

MONTANA DIVISION, FEDERAL HIGHWAY ADMINISTRATION

By: David C Miller Date: 2-6-91

MONTANA STATE HISTORIC PRESERVATION OFFICER

By: Date: 2-4-91

CONCUR

MONTANA DEPARTMENT OF HIGHWAYS

By: Date: Feb 1, 1991

JA:Q:ENV:77.cm

Montana Department
of
Fish, Wildlife & Parks

JAN 12 1995

1420 East Sixth Avenue
Helena, Montana 59620

January 11, 1995

Thomas B. Picciano
Administrator
Druyvestein, Johnson & Anderson
3201 Russell street
Missoula, MT 59801-8591

Re: State Project #STPU and
LWCF Project #30-00221 and 30-00385 - McCormick Park
LWCF Project #30-00269 - Bikeway System

Dear Tom:

As you're aware, the above-listed LWCF projects are protected under the Land and Water Conservation Act, Section 6(f).

From the information and assurances you have provided me that there will be no property taking for the bridge project, it appears there will be no negative impact to the LWCF projects. Therefore, Section 6(f) will not apply. In fact, it appears that the project will greatly enhance access to the parks.

Since the properties are owned by the City of Missoula, any Section 4(f) mitigation should be negotiated with the City.

Thanks for giving me the opportunity to comment. Call at 444-3750 if you need further information.

Sincerely,

Mary Ellen McDonald

MARY ELLEN McDONALD
Program Officer
Resource & Recreation Bureau
Parks Division

MMC

JAN - 4 1995

MISSOULA
DEPARTMENT OF PUBLIC WORKS
435 RYMAN • MISSOULA, MT 59802-4297 • (406) 523-4620

JOSEPH L. ALDEGARIE
Director

Engineering
Traffic
Streets
Sewers
Vehicle Maintenance

Letter No. A94-0156

Druyvestein Johnson & Anderson
3201 Russell Street
Missoula MT 59801-8591

RE: Orange Street Bridge and Riverfront Access Project
STPU 8107(10)
Section 4(f) Evaluation

The project is within the Missoula city limits and is adjacent to:

1. McCormick Park
2. Clark Fork Natural Park

The City of Missoula has jurisdiction over these parks.

For Section 4(f) evaluation purposes for public parks and recreation lands, we concur with the findings of the Environmental Assessment prepared for the project and agree with the assessment of impacts and the proposed mitigation measures for these two parks.

If there are questions regarding this agreement, please contact the undersigned.

Sincerely yours,

Joseph L. Aldega

Joseph L. Aldegarie, P.E.
Director of Public Works

AN EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER M/F/V/H

MONTANA DIVISION

# "NATIONWIDE" PROGRAMMATIC *SECTION 4(f)* EVALUATION FOR HISTORIC BRIDGES

Project # **STPU 8107(10)**, (P.M.S. C# **2462**) Date: 13 Jan. 1995

Project Name: **Orange Street Bridge and Riverfront Access** Location: Missoula

**(Abandoned Milwaukee Overpass Bridge)**

This proposed project requires use of a historic bridge structure that is on, or eligible for listing on the NATIONAL REGISTER OF HISTORIC PLACES. ***A description and location map/"Translite" of this proposed bridge replacement project is attached.***

**NOTE**: *Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.*

| | YES | NO |
|---|---|---|
| 1. Is the bridge a NATIONAL HISTORIC LANDMARK? | ☐ | X |
| 2. Have agreements been reached through the procedures pursuant to *Section 106* of the *National Historic Preservation Act* with the following: | | |
| STATE HISTORIC PRESERVATION OFFICE (SHPO)? | X | ☐ |
| ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)? | X | ☐ |
| 3. Any other agency/ies with jurisdiction at this location? | X | |
| a) If "YES" will additional approval(s) for this *Section 4(f)* application be required? | ☐ | X |
| b) List of agencies with jurisdiction at this location: | | |
| USA - CORPS OF ENGINEERS (*Section 404* Permit) | X | |
| USDA - Forest Service | ☐ | X |
| USDA - Soil Conservation Service (*FPPA*) | ☐ | X |
| FEMA Regulatory Floodway (Permit) | ☐ | X |
| MDFW&P - Parks Division (Fishing Access Site) | ☐ | X |
| MDFW&P - Wildlife Division (wetlands) | ☐ | X |
| MDFW&P - Fisheries Division (*MSPA*) | ☐ | X |
| MDSL (navigable rivers under state law) | ☐ | X |
| MDH&ES - Air Quality Bureau PERMIT | X | |
| MDH&ES - Water Quality Bureau PERMIT | X | |
| MDNR&C (irrigation systems) PERMIT | X | |
| Other: ( ) | | |

## ALTERNATIVES & FINDINGS

**EACH** of the following **ALTERNATIVES** for this proposed project have been evaluated to avoid the use of the historic bridge:

1. "Do Nothing."

2. Rehabilitate the existing bridge without affecting the historic integrity of the structure in accordance with the provisions of *Section 106* in the *NHPA*.

3. Construct the proposed bridge at a location where the existing historic structure's integrity will not be affected as determined by the provisions of the *NHPA*.

The above **ALTERNATIVES** have been applied in accordance with this PROGRAMMATIC *SECTION 4(f)* EVALUATION and are supported by **EACH** of the following **FINDINGS:**

| | YES | NO |
|---|---|---|
| 1. The "Do Nothing" **ALTERNATIVE** has been evaluated and has been found to ignore the basic transportation need at this location. | X | ☐ |
| This **ALTERNATIVE** is neither feasible nor prudent for the following reasons: | | |
| a) Maintenance — this **ALTERNATIVE** does not correct the structurally deficient condition and/or poor geometrics (clearances, approaches, visibility restrictions) found at the existing bridge. Any of these factors can lead to a sudden catastrophic collapse, and/or a potential injury including loss of life. Normal maintenance will not change this situation. | X | ☐ |
| b) Safety — this **ALTERNATIVE** also does not correct the situation which causes the existing bridge to be considered deficient. Because of these deficiencies, the existing bridge presents serious and unacceptable safety hazards to the travelling public and/or places intolerable restrictions (gross vehicle weight, height, and/or width) on transport. | X | ☐ |
| A copy of the MDT Bridge Bureau's Inspection Report is attached.<br>**(Complete Report Available Upon Request)** | X | ☐ |
| 2. The rehabilitation **ALTERNATIVE** has been evaluated with one or more of the following **FINDINGS**: | | |
| a) The existing bridge's structural deficiency is such that it cannot be rehabilitated to meet minimum acceptable load and traffic requirements without adversely affecting the structure's historic integrity. | X | |
| b) The existing bridge's geometrics (height, width) cannot be changed without adversely affecting the structure's historic integrity. | X | |

## ALTERNATIVES & FINDINGS (#2 - conclusion:)

| | YES | NO |
|---|---|---|
| c) This **ALTERNATIVE** does not correct the serious restrictions on visibility (approach geometrics, structural requirements) which also contributes to an unsafe condition at this location. | X | |
| Is this rehabilitation **ALTERNATIVE** therefore considered to be feasible and/or prudent based on the preceding evaluations? | ☐ | X |
| 3. The relocation **ALTERNATIVE**, in which the new bridge has been moved to a site that presents no adverse effect upon the existing structure has also been considered under the following **FINDINGS**: | | |
| a) Terrain and/or local geology. The present structure is located at the only feasible and/or prudent site for a bridge on the existing route. Relocating to a new site — either up-, or downstream of the preferred location — will result in extraordinary bridge/approach engineering and associated construction costs. | X | |
| The preferred site is the only prudent location due to the terrain and/or geologic conditions in the general vicinity. | X | |
| Any other location would cause extraordinary disruption to existing traffic patterns. | X | |
| b) Significant social, economic and/or environmental impacts. Locating the proposed bridge in other than the preferred site would result in significant social/economic impacts such as the displacement of families, businesses, or severing of prime/unique farmlands. | X | |
| Significant environmental impacts such as the extraordinary involvement in wetlands, regulated floodplains, or habitat of threatened/endangered species are likely to occur in any location outside the preferred site. | X | |
| c) Engineering and economics. Where difficulty/ies associated with a new location are less extreme than those listed above, the site may still not be feasible and prudent where costs and/or engineering difficulties reach extraordinary magnitudes. Does the **ALTERNATE** location result in significantly increased engineering or construction costs (such as a longer span, longer approaches, etc.)? | X | |
| d) Preservation of existing historic bridge may not be possible due to either or both of the following: | | |
| the existing structure has deteriorated beyond all reasonable possibility of rehabilitation for a transportation or alternative use; | | X |
| no responsible party can be located to maintain and preserve the historic structure. | X | |

## ALTERNATIVES & FINDINGS (#3. - conclusion:)

| | YES | NO |
|---|---|---|
| Therefore, in accordance with the previously-listed FINDINGS it is neither feasible nor prudent to locate the proposed bridge at a site other than the preferred **ALTERNATE** as described. | X | ☐ |

## MEASURES TO MINIMIZE HARM

This "Nationwide" Programmatic *Section 4(f)* Statement applies only when the following **Measures to Minimize Harm** have been assured; a check in a box MAY void the Programmatic application — if so, a full *Section 4(f)* Evaluation **will be required**:

| | YES | NO |
|---|---|---|
| 1. Is the bridge being rehabilitated under this proposed project? | | X |
| If "YES", is the historic integrity of the structure being preserved to the greatest extent possible; consistent with unavoidable transportation needs, safety, and load requirements? | N/A | ☐ |
| NOTE:<br>If "NO", refer to item 2., following, to determine Programmatic applicability. | | |
| 2. The bridge is being replaced, or rehabilitated to the point where historic integrity is affected. Are adequate records being made of the existing structure under HISTORIC AMERICAN ENGINEERING RECORD standards, or other suitable means developed through consultation with SHPO and the ACHP? | X | ☐ |
| 3. If the bridge is being replaced, is the existing structure being made available for alternative use with a responsible party to maintain and preserve same? | X | ☐ |
| 4. If the bridge is being adversely affected, has agreement been reached through the *Section 106* process of the *National Historic Preservation Act* on these **Measures to Minimize Harm** (which will be incorporated into the proposed project) with the following: | | |
| SHPO? (Date: **May 9, 1989** ) | X | ☐ |
| ACHP? (Date: **May 9, 1989** ) | X | ☐ |
| FHwA? (Date: **May 9, 1989** ) | X | ☐ |
| A copy of the **Programmatic Memorandum of Agreement** (**P.M.o.A.**) signed/approved by these agencies is attached. | X | ☐ |

## COORDINATION

There has been additional **COORDINATION** with the following agencies regarding this proposed project (other than those listed previously):

| | |
|---|---|
| City/County government: | City of Missoula |
| Local historical society: | Missoula Historic Preservation Office |
| Adjacent property owners: | Yes - Contacts and public involvement meetings |
| Others: | Flathead and Kootenai Culture Committees |

Copies of letters from these agencies regarding this proposed project are attached. This proposed project is also documented as an Environmental Assessment under the requirements of the *National Environmental Policy Act* (42 U.S.C. 4321, *et seq.*).

SUMMARY & APPROVAL - The proposed action meets all criteria regarding the required **ALTERNATIVES**, **FINDINGS**, and **Measures to Minimize Harm** which will be incorporated into this proposed project. This proposed project therefore complies with the July 5, 1983 Programmatic *Section 4(f)* Evaluation by the U.S. DEPARTMENT OF TRANSPORTATION's Federal Highway Administration. This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f.**

______________________________ Date: ____________________

Joel M. Marshik, Manager
Environmental Services

Approved: ______________________________ Date: 4-16-96
FHWA Division Administrator

JMM:KMH:VA

Attachments

cc:
James T. Weaver, P.E. - Missoula District Engineer
Carl S. Peil, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

MONTANA DIVISION

# "NATIONWIDE" PROGRAMMATIC *SECTION 4(f)* EVALUATION FOR HISTORIC BRIDGES

Project # **STPU 8107(10)**, (P.M.S. C# **2462**) Date: 13 Jan. 1995

Project Name: **Orange Street Bridge and Riverfront Access** Location: Missoula

**(Orange Street River Bridge)**

This proposed project requires use of a historic bridge structure that is on, or eligible for listing on the NATIONAL REGISTER OF HISTORIC PLACES. ***A description and location map/"Translite" of this proposed bridge replacement project is attached.***

**NOTE**: *Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.*

| | | **YES** | **NO** |
|---|---|---|---|
| 1. Is the bridge a NATIONAL HISTORIC LANDMARK? | | ☐ | X |
| 2. Have agreements been reached through the procedures pursuant to *Section 106* of the *National Historic Preservation Act* with the following: | | | |
| STATE HISTORIC PRESERVATION OFFICE (SHPO)? | | X | ☐ |
| ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)? | | X | ☐ |
| 3. Any other agency/ies with jurisdiction at this location? | | X | |
| a) If "YES" will additional approval(s) for this *Section 4(f)* application be required? | | ☐ | X |
| b) List of agencies with jurisdiction at this location: | | | |
| USA - CORPS OF ENGINEERS (*Section 404* Permit) | | X | |
| USDA - Forest Service | | ☐ | X |
| USDA - Soil Conservation Service (*FPPA*) | | ☐ | X |
| * FEMA Regulatory Floodway (Permit) | PERMIT | ☒ | |
| MDFW&P - Parks Division (Fishing Access Site) | | ☐ | X |
| MDFW&P - Wildlife Division (wetlands) | | ☐ | X |
| * MDFW&P - Fisheries Division (*MSPA*) | PERMIT | ☒ | |
| * MDSL (navigable rivers under state law) | PERMIT | ☒ | |
| * MDH&ES - Air Quality Bureau | PERMIT | X | |
| * MDH&ES - Water Quality Bureau | PERMIT | X | |
| * MDNR&C (irrigation systems) | PERMIT | X | |
| Other: ( ) | | | |

* (SEE ATTACHED COMMENTS)

## ALTERNATIVES & FINDINGS

**EACH** of the following **ALTERNATIVES** for this proposed project have been evaluated to avoid the use of the historic bridge:

1. "Do Nothing."
2. Rehabilitate the existing bridge without affecting the historic integrity of the structure in accordance with the provisions of *Section 106* in the *NHPA*.
3. Construct the proposed bridge at a location where the existing historic structure's integrity will not be affected as determined by the provisions of the *NHPA*.

The above **ALTERNATIVES** have been applied in accordance with this PROGRAMMATIC *SECTION 4(f)* EVALUATION and are supported by **EACH** of the following **FINDINGS:**

| | YES | NO |
|---|---|---|
| 1. The "Do Nothing" **ALTERNATIVE** has been evaluated and has been found to ignore the basic transportation need at this location. | X | ☐ |
| This **ALTERNATIVE** is neither feasible nor prudent for the following reasons: | | |
| a) Maintenance — this **ALTERNATIVE** does not correct the structurally deficient condition and/or poor geometrics (clearances, approaches, visibility restrictions) found at the existing bridge. Any of these factors can lead to a sudden catastrophic collapse, and/or a potential injury including loss of life. Normal maintenance will not change this situation. | X | ☐ |
| b) Safety — this **ALTERNATIVE** also does not correct the situation which causes the existing bridge to be considered deficient. Because of these deficiencies, the existing bridge presents serious and unacceptable safety hazards to the travelling public and/or places intolerable restrictions (gross vehicle weight, height, and/or width) on transport. | X | ☐ |
| A copy of the MDT Bridge Bureau's Inspection Report is attached.<br>**(Complete Report Available Upon Request)** | X | ☐ |
| 2. The rehabilitation **ALTERNATIVE** has been evaluated with one or more of the following **FINDINGS**: | | |
| a) The existing bridge's structural deficiency is such that it cannot be rehabilitated to meet minimum acceptable load and traffic requirements without adversely affecting the structure's historic integrity. | X | ____ |
| b) The existing bridge's geometrics (height, width) cannot be changed without adversely affecting the structure's historic integrity. | X | ____ |

## ALTERNATIVES & FINDINGS (#2 - conclusion:)

| | YES | NO |
|---|---|---|
| c) This **ALTERNATIVE** does not correct the serious restrictions on visibility (approach geometrics, structural requirements) which also contributes to an unsafe condition at this location. | X | |
| Is this rehabilitation **ALTERNATIVE** therefore considered to be feasible and/ or prudent based on the preceding evaluations? | ☐ | X |
| 3. The relocation **ALTERNATIVE**, in which the new bridge has been moved to a site that presents no adverse effect upon the existing structure has also been considered under the following **FINDINGS**: | | |
| a) Terrain and/or local geology. The present structure is located at the only feasible and/or prudent site for a bridge on the existing route. Relocating to a new site — either up-, or downstream of the preferred location — will result in extraordinary bridge/approach engineering and associated construction costs. | X | |
| The preferred site is the only prudent location due to the terrain and/or geologic conditions in the general vicinity. | X | |
| Any other location would cause extraordinary disruption to existing traffic patterns. | X | |
| b) Significant social, economic and/or environmental impacts. Locating the proposed bridge in other than the preferred site would result in significant social/economic impacts such as the displacement of families, businesses, or severing of prime/unique farmlands. | X | |
| Significant environmental impacts such as the extraordinary involvement in wetlands, regulated floodplains, or habitat of threatened/endangered species are likely to occur in any location outside the preferred site. | X | |
| c) Engineering and economics. Where difficulty/ies associated with a new location are less extreme than those listed above, the site may still not be feasible and prudent where costs and/or engineering difficulties reach extraordinary magnitudes. Does the **ALTERNATE** location result in significantly increased engineering or construction costs (such as a longer span, longer approaches, etc.)? | X | |
| d) Preservation of existing historic bridge may not be possible due to either or both of the following: | | |
| the existing structure has deteriorated beyond all reasonable possibility of rehabilitation for a transportation or alternative use; | | X |
| no responsible party can be located to maintain and preserve the historic structure. | X | |

## ALTERNATIVES & FINDINGS (#3. - conclusion:)

| | YES | NO |
|---|---|---|
| Therefore, in accordance with the previously-listed FINDINGS it is neither feasible nor prudent to locate the proposed bridge at a site other than the preferred **ALTERNATE** as described. | X | ☐ |

## MEASURES TO MINIMIZE HARM

This "Nationwide" Programmatic *Section 4(f)* Statement applies only when the following **Measures to Minimize Harm** have been assured; a check in a box MAY void the Programmatic application — if so, a full *Section 4(f)* Evaluation **will be required**:

| | YES | NO |
|---|---|---|
| 1. Is the bridge being rehabilitated under this proposed project? | | X |
| If "YES", is the historic integrity of the structure being preserved to the greatest extent possible; consistent with unavoidable transportation needs, safety, and load requirements? | N/A | ☐ |
| NOTE:<br>If "NO", refer to item 2., following, to determine Programmatic applicability. | | |
| 2. The bridge is being replaced, or rehabilitated to the point where historic integrity is affected. Are adequate records being made of the existing structure under HISTORIC AMERICAN ENGINEERING RECORD standards, or other suitable means developed through consultation with SHPO and the ACHP? | X | ☐ |
| 3. If the bridge is being replaced, is the existing structure being made available for alternative use with a responsible party to maintain and preserve same? | X | ☐ |
| 4. If the bridge is being adversely affected, has agreement been reached through the *Section 106* process of the *National Historic Preservation Act* on these **Measures to Minimize Harm** (which will be incorporated into the proposed project) with the following: | | |
| SHPO? (Date: **May 9, 1989** ) | X | ☐ |
| ACHP? (Date: **May 9, 1989** ) | X | ☐ |
| FHwA? (Date: **May 9, 1989** ) | X | ☐ |
| A copy of the **Programmatic Memorandum of Agreement (P.M.o.A.)** signed/approved by these agencies is attached. | X | ☐ |

## COORDINATION

There has been additional **COORDINATION** with the following agencies regarding this proposed project (other than those listed previously):

City/County government: City of Missoula
Local historical society: Missoula Historic Preservation Office
Adjacent property owners: Yes - Contacts and public involvement meetings
Others: Flathead and Kootenai Culture Committees

Copies of letters from these agencies regarding this proposed project are attached. This proposed project is also documented as an Environmental Assessment under the requirements of the *National Environmental Policy Act* (**42 U.S.C. 4321**, *et seq.*).

SUMMARY & APPROVAL - The proposed action: meets all criteria regarding the required **ALTERNATIVES**, **FINDINGS**, and **Measures to Minimize Harm** which will be incorporated into this proposed project. This proposed project therefore complies with the July 5, 1983 Programmatic *Section 4(f)* Evaluation by the U.S. DEPARTMENT OF TRANSPORTATION's Federal Highway Administration. This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.

____________________ Date: ________________
Joel M. Marshik, Manager
Environmental Services

Approved: ____________________ Date: 4-16-96
For FHWA Division Administrator

JMM:KMH:VA

Attachments

cc:
James T. Weaver, P.E. - Missoula District Engineer
Carl S. Peil, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

3. Any other agency/ies with jurisdiction at this location?

The following agencies will be affected by the proposed design and will be involved in some manner.

**FEMA Regulatory Floodway (Permit)** - The Orange Street River structure is over a major river which has a designated floodway. This project will not encroach on the floodway or increase the flood elevations upstream from the bridge as the endfills will either match the existing locations or be placed further away from the 100-year flood line. The propose design will actually improve the hydraulic flow through this portion of the channel by placing a pier at the end of the existing island and removing the two existing piers that are located in the main channel flow of the river. This would have the effect of lowering the flood elevation at the bridge opening as there would be less restrictions in the waterway. A permit will be required prior to construction of the proposed bridge.

**MDFW&P - Fisheries Division (MSPA)** - Due to the fisheries that are present in the Clark Fork River, the Fisheries Division will be involved not only in the design of the project to assure that specifications are included to protect the fisheries but also during construction to assure that the temporary water quality impacts do not adversely affect the fishery. Permits will be required prior to any construction activites.

**MDSL (Navigable rivers under state law)** - The Clark Fork River has been designated as a navigable river. This project will not affect the navigable status of this river but permits and coordination with State Lands will be required prior to construction.

MONTANA DIVISION

# "NATIONWIDE" *SECTION 4(f)* EVALUATION
FOR MINOR USAGE OF
PUBLIC PARKS, RECREATION LANDS, AND WILDLIFE AND WATERFOWL REFUGES

Project # STPU 8107(10), (P.M.S. C# 2462) Date: 13 Jan, 1995
Project Name: Orange Street Bridge and Riverfront Access Location: Missoula

**(Clark Fork Natural Park)**

NOTE: *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | YES | NO |
|---|---|---|
| 1. Is the *4(f)* site adjacent to the existing highway? | X | ☐ |
| 2. Does the amount and location of the proposed impact area impair the use of the remaining *Section 4(f)* land for its intended purpose? | ☐ | X |
| 3. Does the proposed project require more than a minor amount* of the *Section 4(f)* site for Right-of-Way? | ☐ | X |
| 4. Are there any proximity impacts which would impair the use of the *4(f)* lands for their intended purpose (defined as "constructive use")? | ☐ | X |
| 5. Have the officials with jurisdiction over the property agreed in writing with the assessment of impacts and the proposed mitigation? | X | ☐ |
| 6. Have Federal funds — such as the *National Land & Water Conservation Fund - Section 6(f)* — been used for the acquisition of, or improvements to the *4(f)* site? | ☐ | X |
| If yes — has the land conversion/transfer been coordinated with the appropriate Federal agency, (12) (name) — | N/A | ☐ |
| and are they in agreement? | N/A | ☐ |
| 7. Is the proposed action under an Environmental Impact Statement (E.I.S.)? | ☐ | X |
| 8. Is the proposed project on a new location? | ☐ | X |
| 9. The Scope-of-Work for the proposed project is one of the following: | X | ☐ |
| a) Improved traffic operation; | d | |
| b) Safety improvements; | | |
| c) 3R; | | |
| d) Bridge replacement on essentially the same alignment; or | | |
| e) Addition of lanes. | | |

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*NOTE: MDOH defines a "minor amount" as being not more than 10% of a site under 10 acres in size; 1 acre of a site 10 to 100 acres in size; or 1% of a site greater than 100 acres in size.

NOTE: *Any response in a box requires additional information. Consult the "NATIONWIDE" SECTION 4(F) EVALUATION criteria.*

## ALTERNATIVES CONSIDERED

| | YES | NO |
|---|---|---|
| 1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| 2. An **ALTERNATIVE** has been evaluated which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. | X | ☐ |
| 3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| Descriptions of **ALTERNATIVES 2.** and **3.** are attached.<br>(SEE ATTACHED COMMENTS) | X | ☐ |

## MINIMIZATION OF HARM

| | YES | NO |
|---|---|---|
| 1. The proposed project includes all possible planning to minimize harm. | X | ☐ |
| 2. Measures to minimize harm include the following: | | |
| a) Replacement of the lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value. | N/A | ___ |
| b) Replacement of facilities impacted including sidewalks, paths, benches, lights, trees, and other facilities. | X | ___ |
| c) Restoration/landscaping of disturbed areas. | X | ___ |
| d) Special design features. | X | ___ |
| e) Payment of, or improvements to the remaining *4(f)* lands equal in cost to fair market value. | X | ___ |
| f) Other measures. | X | ___ |

## COORDINATION

| | YES | NO |
|---|---|---|
| 1. The proposed project has been coordinated with the Federal, state, and/or local officials having jurisdiction over the *4(f)* lands.<br>List:<br>**City of Missoula (date: Jan 4, 1995)**<br>**Montana Dept. of Fish Wildlife and Parks (date: Jan 11, 1995)** | X | ☐ |
| 2) In the case of non-federal *4(f)* lands, the official with jurisdiction has been asked to identify any Federal encumbrances — and none exist. | X | ☐ |
| 3) Coordination with the U.S. ARMY - Corps of Engineers has been completed, or a *Section 404* Permit (if applicable) is pending. | X | ☐ |

## SUMMARY AND APPROVAL

The proposed project meets all criteria under the "Nationwide Programmatic" *Section 4(f)* Evaluation approved on December 23, 1986, and is submitted pursuant to **49 U.S.C. 303.**

All required alternatives have been evaluated, and the findings made are clearly applicable to this proposed project.

This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

____________________________ Date: ________________
Joel M. Marshik, Manager
Environmental Services

Approved: ____________________________ Date: 9-16-96
Division Administrator
For Federal Highway Administration

JMM:KMH:VA

Attachments

cc:

James T. Weaver P.E. - Missoula District Engineer
Carl S. Peil, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

*2. An ALTERNATIVE has been evaluated which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.*

There are no options available for improving the highway at this location without involving 4(f) properties. The adjacent 4(f) properties will not be adversely affected and will rather be enhanced by the design of this project. No 4(f) property will be lost or taken from service. Due to the existing corridor and the surrounding area being completely developed, there are no other locations close by which could be utilized without very significant impacts to the environment and the community. This proposed project does not have any adverse affects on the adjacent 4(f) properties. No other options would be feasible or prudent.

*3. An ALTERNATIVE on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.*

There are no possible alternatives available on a new location without severe impacts to both the community and the environment. The proposed project does not affect the adjacent 4(f) properties and therefore no other option would be feasible or prudent.

# MONTANA DIVISION
# "NATIONWIDE" *SECTION 4(f)* EVALUATION
## FOR MINOR USAGE OF
## PUBLIC PARKS, RECREATION LANDS, AND WILDLIFE AND WATERFOWL REFUGES

Project # STPU 8107(10), (P.M.S. C# 2462) Date: 13 Jan, 1995

Project Name: Orange Street Bridge and Riverfront Access Location: Missoula

**(McCormick Park)**

NOTE: *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | YES | NO |
|---|---|---|
| 1. Is the *4(f)* site adjacent to the existing highway? | X | ☐ |
| 2. Does the amount and location of the proposed impact area impair the use of the remaining *Section 4(f)* land for its intended purpose? | ☐ | X |
| 3. Does the proposed project require more than a minor amount* of the *Section 4(f)* site for Right-of-Way? | ☐ | X |
| 4. Are there any proximity impacts which would impair the use of the *4(f)* lands for their intended purpose (defined as "constructive use")? | ☐ | X |
| 5. Have the officials with jurisdiction over the property agreed in writing with the assessment of impacts and the proposed mitigation? | X | ☐ |
| 6. Have Federal funds — such as the *National Land & Water Conservation Fund - Section 6(f)* — been used for the acquisition of, or improvements to the *4(f)* site? | ☒ | — |
| If yes — has the land conversion/transfer been coordinated with the appropriate Federal agency, (12) (name) — FWP | X N/A | ☐ |
| and are they in agreement? | X N/A | ☐ |
| 7. Is the proposed action under an Environmental Impact Statement (E.I.S.)? | ☐ | X |
| 8. Is the proposed project on a new location? | ☐ | X |
| 9. The Scope-of-Work for the proposed project is one of the following:<br>a) Improved traffic operation;<br>b) Safety improvements;<br>c) 3R;<br>d) Bridge replacement on essentially the same alignment; or<br>e) Addition of lanes. | X<br>d | ☐ |

---

*NOTE: MDOH defines a "minor amount" as being not more than 10% of a site under 10 acres in size; 1 acre of a site 10 to 100 acres in size; or 1% of a site greater than 100 acres in size.

*NOTE:* *Any response in a box requires additional information. Consult the "NATIONWIDE" SECTION 4(F) EVALUATION criteria.*

## ALTERNATIVES CONSIDERED

| | YES | NO |
|---|---|---|
| 1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| 2. An **ALTERNATIVE** has been evaluated which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. | X | ☐ |
| 3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| Descriptions of **ALTERNATIVES 2.** and **3.** are attached.<br>(SEE ATTACHED COMMENTS) | X | ☐ |

## MINIMIZATION OF HARM

| | YES | NO |
|---|---|---|
| 1. The proposed project includes all possible planning to minimize harm. | X | ☐ |
| 2. Measures to minimize harm include the following: | | |
| a) Replacement of the lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value. | N/A | ___ |
| b) Replacement of facilities impacted including sidewalks, paths, benches, lights, trees, and other facilities. | X | ___ |
| c) Restoration/landscaping of disturbed areas. | X | ___ |
| d) Special design features. | X | ___ |
| e) Payment of, or improvements to the remaining *4(f)* lands equal in cost to fair market value. | X | ___ |
| f) Other measures. | X | ___ |

## COORDINATION

| | YES | NO |
|---|---|---|
| 1. The proposed project has been coordinated with the Federal, state, and/or local officials having jurisdiction over the *4(f)* lands.<br>List:<br>**City of Missoula (date: Jan 4, 1995)**<br>**Montana Dept. of Fish Wildlife and Parks (date: Jan 11, 1995)** | X | ☐ |
| 2) In the case of non-federal *4(f)* lands, the official with jurisdiction has been asked to identify any Federal encumbrances — and none exist. | X | ☐ |
| 3) Coordination with the U.S. ARMY - Corps of Engineers has been completed, or a *Section 404* Permit (if applicable) is pending. | X | ☐ |

SUMMARY AND APPROVAL

The proposed project meets all criteria under the "Nationwide Programmatic" *Section 4(f)* Evaluation approved on December 23, 1986, and is submitted pursuant to **49 U.S.C. 303.**

All required alternatives have been evaluated, and the findings made are clearly applicable to this proposed project.

This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

____________________ Date: __________
Joel M. Marshik, Manager
Environmental Services

Approved: ____________________ Date: 4-16-96
For Division Administrator
Federal Highway Administration

JMM:KMH:VA

Attachments

cc:

James T. Weaver P.E. - Missoula District Engineer
Carl S. Peil, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

*2. An ALTERNATIVE has been evaluated which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.*

There are no options available for improving the highway at this location without involving 4(f) properties. The adjacent 4(f) properties will not be adversely affected and will rather be enhanced by the design of this project. No 4(f) property will be lost or taken from service. Due to the existing corridor and the surrounding area being completely developed, there are no other locations close by which could be utilized without very significant impacts to the environment and the community. This proposed project does not have any adverse affects on the adjacent 4(f) properties. No other options would be feasible or prudent.

*3. An ALTERNATIVE on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.*

There are no possible alternatives available on a new location without severe impacts to both the community and the environment. The proposed project does not affect the adjacent 4(f) properties and therefore no other option would be feasible or prudent.

# MONTANA DIVISION
# "NATIONWIDE" *SECTION 4(f)* EVALUATION
## FOR MINOR USAGE OF
# PUBLIC PARKS, RECREATION LANDS, AND WILDLIFE AND WATERFOWL REFUGES

Project # **STPU 8107(10)**, (P.M.S. C# **2462** ) Date: 13 Jan, 1995
Project Name: **Orange Street Bridge and Riverfront Access** Location: Missoula

**(Bikeway System)**

NOTE: *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | YES | NO |
|---|---|---|
| 1. Is the *4(f)* site adjacent to the existing highway? | X | ☐ |
| 2. Does the amount and location of the proposed impact area impair the use of the remaining *Section 4(f)* land for its intended purpose? | ☐ | X |
| 3. Does the proposed project require more than a minor amount* of the *Section 4(f)* site for Right-of-Way? | ☐ | X |
| 4. Are there any proximity impacts which would impair the use of the *4(f)* lands for their intended purpose (defined as "constructive use")? | ☐ | X |
| 5. Have the officials with jurisdiction over the property agreed in writing with the assessment of impacts and the proposed mitigation? | X | ☐ |
| 6. Have Federal funds — such as the *National Land & Water Conservation Fund - Section 6(f)* — been used for the acquisition of, or improvements to the *4(f)* site? | ☒ | _ |
| If yes — has the land conversion/transfer been coordinated with the appropriate Federal agency, (12) (name) — FWP (SEE LETTER)<br>and are they in agreement? | X<br>X | ☐<br>☐ |
| 7. Is the proposed action under an Environmental Impact Statement (E.I.S.)? | ☐ | X |
| 8. Is the proposed project on a new location? | ☐ | X |
| 9. The Scope-of-Work for the proposed project is one of the following: | X<br>d | ☐ |

a) Improved traffic operation;
b) Safety improvements;
c) 3R;
d) Bridge replacement on essentially the same alignment; or
e) Addition of lanes.

---

*NOTE: MDOH defines a "minor amount" as being not more than 10% of a site under 10 acres in size; 1 acre of a site 10 to 100 acres in size; or 1% of a site greater than 100 acres in size.

*NOTE:* *Any response in a box requires additional information. Consult the "NATIONWIDE" SECTION 4(F) EVALUATION criteria.*

## ALTERNATIVES CONSIDERED

| | YES | NO |
|---|---|---|
| 1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| 2. An **ALTERNATIVE** has been evaluated which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. | X | ☐ |
| 3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| Descriptions of **ALTERNATIVES 2.** and **3.** are attached.<br>(SEE ATTACHED COMMENTS) | X | ☐ |

## MINIMIZATION OF HARM

| | YES | NO |
|---|---|---|
| 1. The proposed project includes all possible planning to minimize harm. | X | ☐ |
| 2. Measures to minimize harm include the following: | | |
| a) Replacement of the lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value. | N/A | |
| b) Replacement of facilities impacted including sidewalks, paths, benches, lights, trees, and other facilities. | X | |
| c) Restoration/landscaping of disturbed areas. | X | |
| d) Special design features. | X | |
| e) Payment of, or improvements to the remaining *4(f)* lands equal in cost to fair market value. | X | |
| f) Other measures. | X | |

## COORDINATION

| | YES | NO |
|---|---|---|
| 1. The proposed project has been coordinated with the Federal, state, and/or local officials having jurisdiction over the *4(f)* lands.<br>List:<br>**City of Missoula (date: Jan 4, 1995)**<br>**Montana Dept. of Fish Wildlife and Parks (date: Jan 11, 1995)** | X | ☐ |
| 2) In the case of non-federal *4(f)* lands, the official with jurisdiction has been asked to identify any Federal encumbrances — and none exist. | X | ☐ |
| 3) Coordination with the U.S. ARMY - Corps of Engineers has been completed, or a *Section 404* Permit (if applicable) is pending. | X | ☐ |

## SUMMARY AND APPROVAL

The proposed project meets all criteria under the "Nationwide Programmatic" *Section 4(f)* Evaluation approved on December 23, 1986, and is submitted pursuant to **49 U.S.C. 303**.

All required alternatives have been evaluated, and the findings made are clearly applicable to this proposed project.

This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

____________________________ Date: __________________
Joel M. Marshik, Manager
Environmental Services

Approved: ____________________________ Date: 9-16-96
For Division Administrator
Federal Highway Administration

JMM:KMH:VA

Attachments

cc:

James T. Weaver P.E. - Missoula District Engineer
Carl S. Peil, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

*2. An ALTERNATIVE has been evaluated which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.*

There are no options available for improving the highway at this location without involving 4(f) properties. The adjacent 4(f) properties will not be adversely affected and will rather be enhanced by the design of this project. No 4(f) property will be lost or taken from service. Due to the existing corridor and the surrounding area being completely developed, there are no other locations close by which could be utilized without very significant impacts to the environment and the community. This proposed project does not have any adverse affects on the adjacent 4(f) properties. No other options would be feasible or prudent.

*3. An ALTERNATIVE on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.*

There are no possible alternatives available on a new location without severe impacts to both the community and the environment. The proposed project does not affect the adjacent 4(f) properties and therefore no other option would be feasible or prudent.

MONTANA DIVISION

# "NATIONWIDE" *SECTION 4(f)* EVALUATION FOR MINOR IMPACTS
ON
# HISTORIC SITES
## EXCLUDING HISTORIC BRIDGE REPLACEMENTS

Project # **STPU 8107(10)**, (P.M.S. C# **2462**) Date: 13 Jan., 1995

Project Name: **Orange Street Bridge and Riverfront Access** Location: Missoula

**(Historic Southside Neighborhood District)**

***NOTE:** Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | YES | NO |
|---|---|---|
| 1. Is the *4(f)* site adjacent to the existing highway? | X | ☐ |
| 2. Does the proposed project require the removal or alteration of historic structures, and/or objects? | ☐ | X |
| 3. Does the proposed project disturb or remove archaeological resources which are important to preserve in-place rather than to recover? | ☐ | X |
| 4. Is the impact on the *4(f)* site considered minor (i.e.: no effect; or no adverse effect)? | X | ☐ |
| 5. Has the STATE HISTORIC PRESERVATION OFFICE (SHPO) agreed in writing with the assessment of impacts, and the proposed mitigation? | X | ☐ |
| 6. Is the proposed action under an Environmental Impact Statement (E.I.S.)? | ☐ | X |
| 7. Is the proposed project on a new location? | ☐ | X |
| 8. The Scope-of-Work for the proposed project is one of the following: | X<br>d | ☐ |

a) Improved traffic operation;
b) Safety improvements;
c) 3R;
d) Bridge replacement on essentially the same alignment; or
e) Addition of lanes.

ALTERNATIVES CONSIDERED

| | | |
|---|---|---|
| 1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |

*NOTE:* *Any response in a box requires additional information.*
*Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | **YES** | **NO** |
|---|---|---|
| ALTERNATIVES CONSIDERED (conclusion:) | | |
| 2. An **ALTERNATIVE** has been evaluated on the existing alignment which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. | X | ☐ |
| 3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| Descriptions of **ALTERNATIVES 2**. and **3**. are attached.<br>(SEE ATTACHED COMMENTS) | X | ☐ |

MINIMIZATION OF HARM

| | | |
|---|---|---|
| 1. The proposed project includes all possible planning to minimize harm. | X | ☐ |

2. Measures to minimize harm include the following:
   1. Lower road grades next to property to reduce visual impact
   2. Landscape around roadway fills to match with parks and neighborhoods
   3. Design road fills so as not to encroach on historic properties.
   4. No contributing historic structures will be disturbed

COORDINATION

1. The proposed project has been **COORDINATED** with the following:

| | | |
|---|---|---|
| a) SHPO (date: 2/4/91 and 1/3/95) | X | ☐ |
| b) ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP, date: 3/18/91) | X | ☐ |
| c) Property owner (date: public meetings on 2/23/94, 3/14/94, 3/30/94 5/11/94, 9/28/94 and several individual meetings) | X | ____ |
| d) Local/State/Federal agencies List: | X | ☐ |

City of Missoula (date: Continual during Assessment process)

MDT (date: 2/1/91)

FWP (date: 1/11/95)

SHPO (date: 1/3/95)

FHWA (date: 2/6/91)

2. Comments from the agencies regarding this proposed project, and/or the mitigation are included in the appendix of the Environmental Assessment.

## SUMMARY

All required **ALTERNATIVES** have been evaluated and the proposed project meets all the criteria included in the "Nationwide Programmatic" *Section 4(f)* evaluation approved on December 23, 1986. This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

## APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f.**

______________________________ Date: ____________________
Joel M. Marshik, Manager
Environmental Services

Approved: ______________________________ Date: 9-16-96
For Division Administrator
Federal Highway Administration

JMM:KMH:VA

cc:
James T. Weaver, P.E. - Missoula District Engineer
Carl S. Piel, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

*2. An ALTERNATIVE has been evaluated which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.*

There are no options available for improving the highway at this location without involving 4(f) properties. The adjacent 4(f) properties will not be adversely affected and will rather be enhanced by the design of this project. No 4(f) property will be lost or taken from service. Due to the existing corridor and the surrounding area being completely developed, there are no other locations close by which could be utilized without very significant impacts to the environment and the community. This proposed project does not have any adverse affects on the adjacent 4(f) properties. No other options would be feasible or prudent.

*3. An ALTERNATIVE on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.*

There are no possible alternatives available on a new location without severe impacts to both the community and the environment. The proposed project does not affect the adjacent 4(f) properties and therefore no other option would be feasible or prudent.

MONTANA DIVISION

# "NATIONWIDE" *SECTION 4(f)* EVALUATION FOR MINOR IMPACTS
ON
# HISTORIC SITES
## EXCLUDING HISTORIC BRIDGE REPLACEMENTS

Project # **STPU 8107(10)**, (P.M.S. C# **2462** )    Date: 13 Jan., 1995

Project Name: **Orange Street Bridge and Riverfront Access**    Location: Missoula

**(Missoula Canal)**

***NOTE:*** *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | | YES | NO |
|---|---|---|---|
| 1. | Is the *4(f)* site adjacent to the existing highway? | X | ☐ |
| 2. | Does the proposed project require the removal or alteration of historic structures, and/or objects? | ☐ | X |
| 3. | Does the proposed project disturb or remove archaeological resources which are important to preserve in-place rather than to recover? | ☐ | X |
| 4. | Is the impact on the *4(f)* site considered minor (i.e.: no effect; or no adverse effect)? | X | ☐ |
| 5. | Has the STATE HISTORIC PRESERVATION OFFICE (SHPO) agreed in writing with the assessment of impacts, and the proposed mitigation? | X | ☐ |
| 6. | Is the proposed action under an Environmental Impact Statement (E.I.S.)? | ☐ | X |
| 7. | Is the proposed project on a new location? | ☐ | X |
| 8. | The Scope-of-Work for the proposed project is one of the following:<br>a) Improved traffic operation;<br>b) Safety improvements;<br>c) 3R;<br>d) Bridge replacement on essentially the same alignment; or<br>e) Addition of lanes. | X<br>d | ☐ |

## ALTERNATIVES CONSIDERED

| | | | |
|---|---|---|---|
| 1. | The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |

**NOTE:** *Any response in a box requires additional information.*
*Consult the "Nationwide" Section 4(f) Evaluation criteria.*

## ALTERNATIVES CONSIDERED (conclusion:)

| | **YES** | **NO** |
|---|---|---|
| 2. An **ALTERNATIVE** has been evaluated on the existing alignment which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. | X | ☐ |
| 3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| Descriptions of **ALTERNATIVES 2.** and **3.** are attached. | X | ☐ |

## MINIMIZATION OF HARM

| | | |
|---|---|---|
| 1. The proposed project includes all possible planning to minimize harm. | X | ☐ |

2. Measures to minimize harm include the following:
   1. **Extend existing box culvert**
   2. **Construction to occur only during non-irrigation season.**
   3. **Close coordination with irrigation company and ditch rider.**
   4. **No changes, removal or realignment of any canals will be required.**

## COORDINATION

1. The proposed project has been **COORDINATED** with the following:

| | | |
|---|---|---|
| a) SHPO (date: 2/4/91 and 1/3/95) | X | ☐ |
| b) ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP, date: 3/18/91) | X | ☐ |
| c) Property owner (date: public meetings on 2/23/94, 3/14/94, 3/30/94 5/11/94, 9/28/94 and several individual meetings) | X | ____ |
| d) Local/State/Federal agencies | X | ☐ |

List:

City of Missoula (date: Continual during Assessment process)
MDT (date: 2/1/91)
FWP (date: 1/11/95)
FHWA (date: 2/6/91)

2. Comments from the agencies regarding this proposed project, and/or the mitigation are included in the appendix of the Environmental Assessment.

## SUMMARY

All required **ALTERNATIVES** have been evaluated and the proposed project meets all the criteria included in the "Nationwide Programmatic" *Section 4(f)* evaluation approved on December 23, 1986. This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

## APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.

______________________________ Date: ____________________
Joel M. Marshik, Manager
Environmental Services

Approved: ______________________________ Date: 9-16-96
For Division Administrator
Federal Highway Administration

JMM:KMH:VA

cc:
James T. Weaver, P.E. - Missoula District Engineer
Carl S. Piel, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

*2. An ALTERNATIVE has been evaluated which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.*

There are no options available for improving the highway at this location without involving 4(f) properties. The adjacent 4(f) properties will not be adversely affected and will rather be enhanced by the design of this project. No 4(f) property will be lost or taken from service. Due to the existing corridor and the surrounding area being completely developed, there are no other locations close by which could be utilized without very significant impacts to the environment and the community. This proposed project does not have any adverse affects on the adjacent 4(f) properties. No other options would be feasible or prudent.

*3. An ALTERNATIVE on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.*

There are no possible alternatives available on a new location without severe impacts to both the community and the environment. The proposed project does not affect the adjacent 4(f) properties and therefore no other option would be feasible or prudent.

# MONTANA DIVISION

# "NATIONWIDE" *SECTION 4(f)* EVALUATION FOR MINOR IMPACTS
ON
# HISTORIC SITES
EXCLUDING HISTORIC BRIDGE REPLACEMENTS

Project # **STPU 8107(10)** , (P.M.S. C# **2462** ) Date: 13 Jan., 1995

Project Name: **Orange Street Bridge and Riverfront Access** Location: Missoula

**(Dinsmore Canal)**

***NOTE:*** *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

| | **YES** | **NO** |
|---|---|---|
| 1. Is the *4(f)* site adjacent to the existing highway? | X | ☐ |
| 2. Does the proposed project require the removal or alteration of historic structures, and/or objects? | ☐ | X |
| 3. Does the proposed project disturb or remove archaeological resources which are important to preserve in-place rather than to recover? | ☐ | X |
| 4. Is the impact on the *4(f)* site considered minor (i.e.: no effect; or no adverse effect)? | X | ☐ |
| 5. Has the STATE HISTORIC PRESERVATION OFFICE (SHPO) agreed in writing with the assessment of impacts, and the proposed mitigation? | X | ☐ |
| 6. Is the proposed action under an Environmental Impact Statement (E.I.S.)? | ☐ | X |
| 7. Is the proposed project on a new location? | ☐ | X |
| 8. The Scope-of-Work for the proposed project is one of the following: | X<br>d | ☐ |

a) Improved traffic operation;
b) Safety improvements;
c) 3R;
d) Bridge replacement on essentially the same alignment; or
e) Addition of lanes.

## ALTERNATIVES CONSIDERED

| | | |
|---|---|---|
| 1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |

***NOTE:*** *Any response in a box requires additional information.*
*Consult the "Nationwide" Section 4(f) Evaluation criteria.*

ALTERNATIVES CONSIDERED (conclusion:)

| | YES | NO |
|---|---|---|
| 2. An **ALTERNATIVE** has been evaluated on the existing alignment which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. | X | ☐ |
| 3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. | X | ☐ |
| Descriptions of **ALTERNATIVES 2.** and **3.** are attached.<br>(SEE ATTACHED COMMENTS) | X | ☐ |

MINIMIZATION OF HARM

| | YES | NO |
|---|---|---|
| 1. The proposed project includes all possible planning to minimize harm. | X | ☐ |

2. Measures to minimize harm include the following:
   1. **Extend existing box culvert**
   2. **Construction to occur only during non-irrigation season.**
   3. **Close coordination with irrigation company and ditch rider.**
   4. **No changes, removal or realignment of any canals will be required.**

COORDINATION

1. The proposed project has been **COORDINATED** with the following:

| | YES | NO |
|---|---|---|
| a) SHPO (date: 2/4/91 and 1/3/95) | X | ☐ |
| b) ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP, date: 3/18/91) | X | ☐ |
| c) Property owner (date: public meetings on 2/23/94, 3/14/94, 3/30/94 5/11/94, 9/28/94 and several individual meetings) | X | |
| d) Local/State/Federal agencies | X | ☐ |

List:

City of Missoula (date: Continual during Assessment process)
MDT (date: 2/1/91)
FWP (date: 1/11/95)
FHWA (date: 2/6/91)

2. Comments from the agencies regarding this proposed project, and/or the mitigation are included in the appendix of the Environmental Assessment.

## SUMMARY

All required **ALTERNATIVES** have been evaluated and the proposed project meets all the criteria included in the "Nationwide Programmatic" *Section 4(f)* evaluation approved on December 23, 1986. This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

## APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.

______________________________ Date: ____________________
Joel M. Marshik, Manager
Environmental Services

Approved: ______________________________ Date: 4-16-96
For Division Administrator
Federal Highway Administration

JMM:KMH:VA

cc:
James T. Weaver, P.E. - Missoula District Engineer
Carl S. Piel, P.E. - Preconstruction Engineer
Joseph P. Kolman, P.E. - Bridge Engineer
Thomas E. Martin, P.E., Chief, Right-of-Way Bureau
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, Manager - Environmental Services

*2. An ALTERNATIVE has been evaluated which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.*

There are no options available for improving the highway at this location without involving 4(f) properties. The adjacent 4(f) properties will not be adversely affected and will rather be enhanced by the design of this project. No 4(f) property will be lost or taken from service. Due to the existing corridor and the surrounding area being completely developed, there are no other locations close by which could be utilized without very significant impacts to the environment and the community. This proposed project does not have any adverse affects on the adjacent 4(f) properties. No other options would be feasible or prudent.

*3. An ALTERNATIVE on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.*

There are no possible alternatives available on a new location without severe impacts to both the community and the environment. The proposed project does not affect the adjacent 4(f) properties and therefore no other option would be feasible or prudent.

# APPENDIX 3

*(THE FOLLOWING ITEMS ARE REFERRED TO IN THE ENVIRONMENTAL ASSESSMENT TEXT IN SECTION 5 OR ARE ADDED AS SUPPLEMENTARY MATERIALS)*

LETTER OF INTENT MAILING LIST

## LOCAL INTERESTS

MAYOR DANIEL KEMMIS
524 BENTON
MISSOULA MT 59801

MIKE BENNETT
1503 SAINT ANN DRIVE
MISSOULA MT 59801

ELAINE SHEA
1025 BRIAR
MISSOULA MT 59802

LINDA TRACY
435 RYMAN
MISSOULA MT 59802-4297

KELLY ROSENLEAF
1314 COOPER
MISSOULA MT 59802

MARILYN CREGG
530 MCLEOD AVE
MISSOULA MT 59801

CHRIS GINGERELLI
321 DALY AVE
MISSOULA MT 59801

DOUG HARRISON
217 WOODWORTH
MISSOULA MT 59801

ROBERT J HERMES
606 SIMONS DR
MISSOULA MT 59803

JACK REIDY
104 PINEHURST COURT
MISSOULA MT 59803

CURTIS HORTON
6103 LONGVIEW
MISSOULA MT 59803

CRAIG SWEET
1801 S 8TH W
MISSOULA MT 59801

AL SAMPSON
828 ROLLINS
MISSOULA MT 59801

U S POSTMASTER
U S POST OFFICE
1100 W KENT
MISSOULA MT 59801

MSLA COUNTY COMMISSIONERS
MISSOULA COUNTY COURTHOUSE
200 W BROADWAY
MISSOULA MT 59802

USA FOREST SERVICE
DEPT OF AGRICULTURE
P O BOX 1669
MISSOULA MT 59801

HORACE BROWN
MSLA COUNTY SURVEYOR
200 W BROADWAY
MISSOULA MT 59802

JOSEPH L ALDEGARIE PE
DIRECTOR OF PUBLIC WORKS
435 RYMAN
MISSOULA MT 59802-4297

BRUCE T BENDER PE
CITY ENGINEER
435 RYMAN
MISSOULA MT 59802-4297

JOHN DEVORE
MISSOULA COUNTY COURTHOUSE
200 W BROADWAY
MISSOULA MT 59802

JIM CARLSON
CITY/COUNTY HEALTH DEPT
301 W ALDER
MISSOULA MT 59802

FLATHEAD CULTURAL COMMITTEE
C/O GERMAIN DU-MONTIER
P O BOX 418
ST IGNATIUS MT 59865

KOOTENAI CULTURAL COMMITTEE
C/O PATRICIA HEWANKORN
P O BOX 1452
ELMO MT 59915

MSLA REDEVELOPMENT AENCY
GEOFF BADENOCH
123 W SPRUCE
MISSOULA MT 59802

KAREN JAWORSKY
CITY BICYCLE-PED COORDINATOR
435 RYMAN
MISSOULA MT 59802

MIKE KRESS
MOCD
435 RYMAN
MISSOULA MT 59802-4297

JIM VAN FOSSEN
MISSOULA PARKS & RECREATION
645 HASTINGS
MISSOULA MT 59801

RON KLAPHAKE
MSLA ECON DEVELOPMENT CORP
127 E FRONT
MISSOULA MT 59801

CHRIS BEHAN
RIVERFRONT PARK SYSTEM/MRA
123 W SPRUCE
MISSOULA MT 59802

KEVIN KREBSBACH
U OF M
FACILITIES SERVICES BLDG 32
MISSOULA MT 59812

NICK BAKER
1527 S 4TH STREET W
MISSOULA MT 59801

RALPH FRISBY
2075 COOPER, #714
MISSOULA MT 59802

HANK HARRINGTON
1510 KHANABAD DRIVE
MISSOULA MT 59802

LEN LABUFF
534 CLEVELAND
MISSOULA MT 59801

ETHEL MACDONALD
316 W CENTRAL
MISSOULA MT 59801

DENISE POSEY
517 N 3RD ST W
MISSOULA MT 59802

MARYLON WILSON
130 JEFFERSON ST., #1
MISSOULA MT 59801

SGT BRENT SELLS
MISSOULA POLICE DEPT
435 RYMAN
MISSOULA MT 59802

ROOSEVELT SCHOOL
503 EDITH
MISSOULA MT 59801

## COMMUNICATIONS

KECI TV
340 W MAIN
MISSOULA MT 59801

KDXT/KGRZ RADIO
P O BOX 4106
MISSOULA MT 59801

KGVO NEWS RADIO
127 N HIGGINS AVE
MISSOULA MT 59801

KYLT AM RADIO
2701 N RESERVE
MISSOULA MT 59801

KLCY/KYSS RADIO
400 RYMAN AVE
MISSOULA MT 59801

KMSO RADIO
725 STRAND AVE
MISSOULA MT 59801

KPAX TV
2204 REGENT
MISSOULA MT 59801

KTMF TV
2200 STEPHENS AVE
MISSOULA MT 59801

KUFM
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Reynolds Radiator Service
233 West Main
Missoula MT 59802 ...

Lorraine Kester
Rocky Mountain Impressions
PO Box 2370
Missoula MT 59806 ...

Lt. Robert Bowman
Salvation Army
P. O. Box 8123
Missoula MT 59807 ...

Larry White
St. Patrick Hospital
500 West Broadway
Missoula MT 59802 ...

Bob & Terry Disney
Sullivan & Hunt
Box 7697
Missoula MT 59807 ...

Ted Heuchling
Summit Financial
201 West Main, Suite 101
Missoula MT 59802 ...

Kim Deanda
Tangles
275 West Main
Missoula MT 59802 ...

Bill Warden
The Shack
222 West Main Street
Missoula MT 59802 ...

Bill McMullen
Valley Motor Supply
301 West Broadway
Missoula MT 59802 ...

Dan Geary, Linda Hom, Carolyn Sutton
Vintage Savvy
223 West Front
Missoula MT 59802 ...

Paul Gierach
Western Business Equipment
225 West Broadway
Missoula MT 59802 ...

Gary Larson, Administrator
Western Montana Clinic
515 West Front St.
Missoula MT 59802 ...

Rick Nash, Arnie Shackelford
ZIP Auto Service
251 West Main
Missoula MT 59802 ...

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413 NORTH AVE EAST
MISSOULA MT 59801

DAVID PAULI
149 KENSINGTON
MISSOULA MT 59801

DEBORAH RICHIE
503 LINDEN
MISSOULA MT 59802

JOHN MANGIAMELI
323 HAZEL
MISSOULA MT 59801

JAMES HOFFMAN
265 W FRONT ST
MISSOULA MT 59802

## SPECIAL

HNTB
600 108TH AVE SUITE 405
BELLEVUE WA 98004

CAMPBELL REYNOLDS ASSOCIATES
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HAMILTON MT 59840

JILL THORNTON
P O BOX 9431
MISSOULA MT 59807

GCM SERVICES, INC
LYNN FREDLUND
P O BOX 3047
BUTTE MT 59702

NATURAL RESOURCES SERVICES
GEORGE CHAFFEE
P O BOX 1559
EUREKA MT 59917

MISSOULA
DEPARTMENT OF PUBLIC WORKS
435 RYMAN • MISSOULA, MT 59802-4297 • (406) 523-4620

JOSEPH L. ALDEGARIE
Director

Engineering
Traffic
Streets
Sewers
Vehicle Maintenance

February 8, 1994

Subject: Orange Street Bridge and Riverfront Access Project
State Project No. STPU 8107(10)
City Project No. 93-073

The City of Missoula, in conjunction with the Montana Department of Transportation, intends to complete a project for the improvement of the Orange Street Bridge and for development of bicycle/pedestrian access across, and to the riverfront trail system and parks, along the Clark Fork River. The City has contracted with Druyvestein Johnson & Anderson to complete this project.

We'd like to hear your ideas, comments and suggestions for this project.

The project includes the area along Orange Street from Front Street on the north to South First Street on the south and includes both the Clark Fork River crossing and the abandoned Old Milwaukee Railroad overpass. A map is enclosed.

We'll identify and develop various alternatives for vehicular traffic as well as non-motorized transportation. Bicycle/pedestrian river crossing and access/circulation to the riverfront trails and parks along both shores of the Clark Fork River will be an important part of the project.

Since the primary purpose of the project is to reduce traffic congestion and vehicle emissions due to traffic bottlenecks, stopping and idling, we plan to secure federal Congestion Mitigation and Air Quality (CMAQ) funding for the project.

Phase 1 of this project, including public involvement and preparation of an Environmental Assessment (EA), will determine the reasonable alternatives for the vehicular river crossing and non-motorized access and crossing for bicycles and pedestrians. Grade changes for the river bridge and the old railroad overpass will also be evaluated. A conceptual design of the preferred alternative will be prepared as part of this contract for the initial phase of the project.

ORANGE STREET BRIDGE
and Riverfront Access

AN EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER M/F/V/H

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Phase 2 will include design, construction plans and actual construction of the project which will take place under a future contract.

Initial steps, including the establishment of a technical advisory committee and stakeholder concept teams have already been taken. This project will include open forum public scoping meetings, informal informational meetings and a formal hearing.

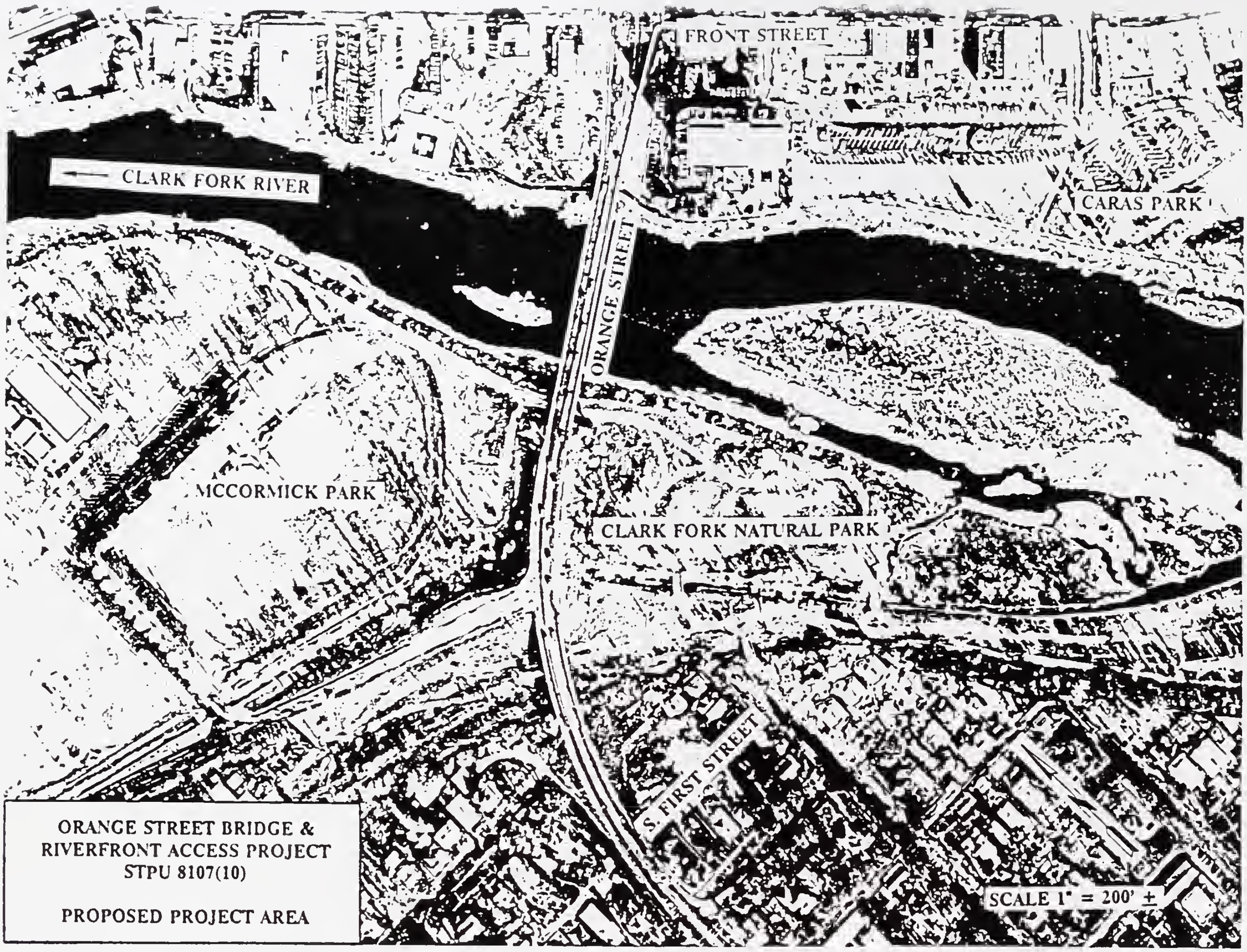
**The first scoping meeting will be held on Wednesday, February 23, 1994 at 6:30 p.m. at Roosevelt School, 503 Edith Street, Missoula. Wheel chair access is on the Stephens Street side of the building from the playground area. A short presentation will be held at 7:30 p.m.**

We'd like to hear from you -- opinions or suggestions, comments on environmental matters, access or circulation concerns, safety considerations, problems this project could cause or eliminate, plans that could be affected, or any other matter you think is appropriate. In addition, if there's anyone you think should be contacted who isn't on the enclosed list, please let us know.

Joe Aldegarie

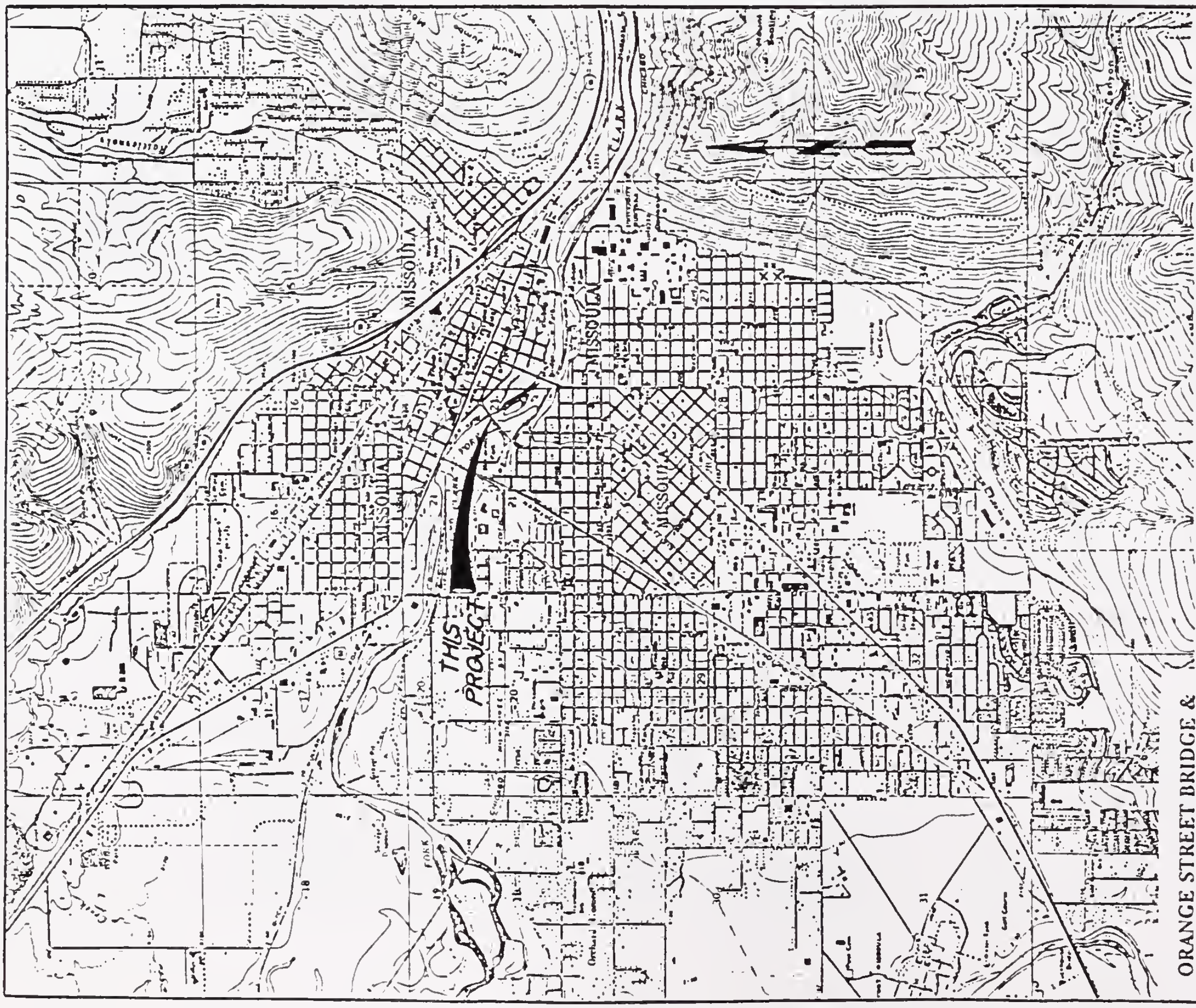
Joe Aldegarie, P.E.
Director of Public Works
City of Missoula
435 Ryman
Missoula, MT 59802-4297
523-4621

Enclosures



ORANGE STREET BRIDGE &
RIVERFRONT ACCESS PROJECT
STPU 8107(10)

PROPOSED PROJECT AREA



## VICINITY MAP

ORANGE STREET BRIDGE &
RIVERFRONT ACCESS PROJECT
STPU 8107(10)

PROPOSED PROJECT AREA

2007

# PROOF OF PUBLICATION

Debbie Saunders being first duly sworn deposes and says, that the above named is the prinicpal clerk of THE MISSOULIAN, the publishers of The Sunday Missoulian, a daily newspaper of general circulation, printed and published in the City of Missoula, County of Missoula, State of Montana, and that the subjoined Scoping Meeting a copy of which as printed is hereto attached, was printed and published in the regular and entire issue of said paper ONCE

For ________ successive weeks, commencing on the ______, day of ________, 19 ____,

and printed and published on the following dates thereafter, to wit: February 20 1994

NOTICE
Orange Street Bridge and Riverfront Access Project first public scoping meeting Wednesday, February 23, 1994; 6:30-9:00 p.m.; Open forum (short presentation at 7:30 p.m.) Roosevelt School Gymnasium, 503 Edith Street, Missoula, Montana. Public comment encouraged.
2001 Feb 20 1994

Debbie Saunders

STATE OF MONTANA )
: ss
County of Missoula )

On this 21st day of February, 19 94, before me, a notary public in and for said state, personally appeared Debbie Saunders, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same.

Renee Selleck
Notary Public for the State of Montana
Residing at Missoula, Montana
My commission expires: 12/17/95

(Note: This proof should be attached to the original instrument of which publication is made.)

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MISSOULA DEPARTMENT OF PUBLIC WORKS

City Project No. 93-073

Project No. STPU 8107(10)

## ORANGE STREET BRIDGE
and Riverfront Access

## PUBLIC SCOPING MEETING

OPEN FORUM

Wednesday, February 23, 1994
6:30 - 9:00 P.M.
(Short Presentation at 7:30 P.M.)

ROOSEVELT SCHOOL GYMNASIUM
503 Edith Street, Missoula, Montana

[Wheelchair Access is on Stephens Street Side of the Building]

The City of Missoula, in conjunction with the Montana Department of Transportation, intends to complete a project for the improvement of the Orange Street Bridge, and the development of bicycle/pedestrian access across and to the parks and riverfront trail system along the Clark Fork River.

We'd like to hear from you: opinions or suggestions, comments on environmental matters, access or circulation concerns, safety considerations, problems this project could cause or eliminate, plans that could be affected, or any other related matters you think are appropriate.

Representatives of the engineering firm of Druyvestein Johnson & Anderson and the City of Missoula will be on hand to receive your comments and suggestions.

We hope to see you there!

FOR MORE INFORMATION
or to be placed on the mailing list, contact:

Vaughn Anderson or Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, Montana
721-4320

Joseph Aldegarie
Director of Public Works
435 Ryman
Missoula, Montana
523-4620

SUNDAY
FEB 20, 1994
MISSOULIAN
MONTANA SECTION
PAGE B-2

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## AROUND MISSOULA

2/23/94

### WEDNESDAY

### PUBLIC EVENTS

MISSOULA COUNTY COMMISSIONERS, 1:30 p.m., Room 701, Courthouse Annex, 200 W. Broadway.

MISSOULA CITY COUNCIL committees: Administration and Finance, 3 p.m.; Committee of the Whole, 4 p.m., council conference room, City Hall, 435 Ryman St.

STEVENSVILLE SCHOOL DISTRICT, student hearing/executive session, 7 p.m., high school library.

DEPARTMENT OF PUBLIC WORKS, Orange Street Bridge and riverfront access first public meeting, 6:30-9 p.m., Roosevelt School, gymnasium, 503 Edith St. Call Vaughn Anderson, 721-4320 or Joe Aldegarie, 523-4620.

CITY BOARD OF ADJUSTMENT, 7:30 p.m., council chambers, City Hall, 435 Ryman St.

### ORGANIZATIONS

WEDNESDAY
FEB 23, 1994
MISSOULIAN

## SCOPING MEETING NO. 1
## ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT
Wednesday, February 23, 1994

**Questions at the Presentation:**

-Comment on Advisory Committee composition and function
-Any conservation groups like open space included in Stakeholder Teams
-How were advisory groups chosen?
-Who decided on the constituency of the Stakeholder Teams
-Are Stakeholder Team Meetings open to the public?
-What about groups that feel they are not represented?

**Comments received during the open forum:**
-Don't cut the river any more - no more bridges between Higgins and Orange. Sling bike/pedestrian crossing under existing structure

-Need separate bike lane on bridge for bike commuters.

-Need commuting ability for bikes and pedestrians and recreational opportunities. Do not have a new crossing of the river - use the existing site.

-Bike lanes should be on grade with vehicle lanes, but with a concrete divider (similar in size to a speed bump) that would prevent traffic generated grit and garbage from being blown onto bike lane by street sweeper trucks.

-Pedestrian path should be similar to existing path on Higgins Bridge; on a higher level and protected/divided by a street-side handrail.

-Suggested design of new bridge - no piers - single arch.

-Would like to see picture of cantilever bike/peds on bridge.

-Orange street south of bridge - get rid of the center turn lane and add bicycle lane

-Cregg lane intersection improvements - left turn acceleration and deceleration lanes to accommodate the bridge

-Orange Street south of Bridge - get rid of the middle turn land and add bicycle lanes both sides.

-Cregg lane intersection - Should be improved to more perpendicular entrance - left turn lane acceleration lane and deceleration lane.

-Views - Second bridge adds to visual clutter

-Costs - Missoula will pay for separate bridge while State pays for Orange Street Bridge.

-Safety - Keep Peds/Bikes within view of main traffic.

-Wants bike/ped bridge to be part of the vehicle bridge - just widen it.

-Favors lowering grade of bridge.

-Put public service announcement on KUFM - FM and KGVO - AM

## WRITTEN COMMENTS SUBMITTED ON COMMENT SHEETS

-We've been through a number of public processed on this bridge question - I've been part of three - each time the outcome is to recommend against a separate bridge between Orange and Higgins - we need some closure on this. Rule this alternative out.

-Both as a private citizen and as a representative of McCormick Neighborhood Association, I may say that we support "bicycle /pedestrian access to trails and parks" issues being incorporated into the greater Orange Street bridge improvement project. We would like to see a bike/pedestrian access added to , built upon, basically constructed along with the Orange Street Bridge improvements to traffic access. We also have some "traffic routing" concerns relating to the proposed Ice Rink, project planned for McCormick Park. As one crosses Orange Street bridge from the south to north there is currently a "left had turn allowed" onto the street leading to the Park. We hope that the left turn will remain allowed, albeit regulated, in order not to ------ an overload of traffic going to Ice events through the usually quiet neighborhood streets.

-Need "bank level" pedestrian/slow speed bicycle bridge cantilevered under/beside vehicle bridge - east side for shade in summer, sun in winter. Also need bike lane on bridge for commuter bicyclists. Keep bridge high enough so that current east/west trails can continue under bridge (next to river) without a dip to get under the bridge. Please design bike and ped facilities for high volumes - they will be coming. Put one or two bump outs on bike/ped bridge so people can stop and view river, talk about the weather, etc. Buffer the roadway from the parks with landscaping to improve aesthetics and reduce noise.

-No split level - it would limit visibility, be a security problem, people wouldn't use it at night.

-Must accommodate commuter cyclists as well as recreation cyclists.

-Roadway must include a 5' bicycle lane on either side, and walkways to accommodate peds, wheelchairs, rollerbladers.

-Possible a separate, street-level area separated from traffic with a curb for bikes, and peds. Bike and ped lane separated with dotted line (check safety issues at intersection on this.)

-Make sure bike lanes don't stop at 1st and Front Streets, encourage city to take out center turn lane to make room for bike lanes - continuity .

-No second bridge - expensive, ugly, will effect island ecosystem - you'll have to accommodate cyclists and peds anyway on the Orange Street bridge.

-Lower grade to facilitate access to parks.

-Provide visual and acoustical screening - may be as simple as landscaping.

-Separate bicycle and pedestrian traffic, but not necessarily a separate bridge, perhaps a cantilever structure or an under bridge structure.

-Turns into Cregg lane from south or out of Cregg lane are dangerous, should another way into McCormick park be found.?

-The idea of a lower bridge for peds/bike is frightening to me. Being out of sight is dangerous. Transient activity in that area is at times high. We do not have sufficient community policing to address t his. Unsafe for children, elderly, and individuals with disabilities.

-I like the "footbridge" at the university. - is something like that possible. It might be interesting to look at transient/police activities in the area and how it is dealt with.

-A rebuilt or replaced Orange Street Bridge should include bicyclo podestrian and wheelchair facilities built in .

-To justify a separate footbridge in the immediate vicinity (which was originally proposed as an amenity) as a transportation facility is not a good precedent or policy.

-Transportation loops in the downtown riverfront park system should reflect a difference in use between the north and south side of the river.....The northside being more groomed and appropriate for functions and group activities; and the southside more appropriate for a more natural, "reclaimed" feeling.

- I would suggest expanding or changing, the stakeholders committees (quickly) in order to more accurately reflect the public involvement that has gone into the riverfront area. The business community is certainly well represented....Open space and conservation minded people are represented less but have historically been much more involved.
-River level ped/bike bridge would maximlze existing trail system usage, allow for use of existing parking for trail users and add to trail system experience.

-A bike/ped facility provides either commuter or recreational experiences (although some overlap is true). Assuming a separate or bank level facility is more recreational, the experience should reflect it. A separalo bank level bridge is obviously yields that experience. A slung or a ped facility needs to reflect the same, or near same, experience, e.g. noise, glop from joints and drains, can hear the river.

## COMMENTS WRITTEN ON POSTER PAPER

-No separate bridge - protect in-river islands as wildlife corridors (birds, deer, etc.) Put pedestrian and bike bride with Orange Street Bridge - Below or attached.

-Conserve what's left of river's natural character.....no separate bridge!

-Maintain sense of the length and breadth of the river- no additional bridges. For pedestrians and recreational bikers put a bridge under the existing bridge.

-To coexist with wildlife passing through the river corridor, keep people on the banks especially true for island complex east of Orange Street Bridge.

-Don't lower Orange Street Bridge and the Milwaukee Overpass, keep the trail under the overpass as part of an eventual long-distance cross-country trail (e.g. bikes) to Idaho and on east as well.

-Any transportation facility should include access for walking, bikes, and wheelchairs. We need to integrate, not segregate access.

-No separate bike/ped bridge, if a bridge is called for attach it to Orange Street Bridge. Protect the islands as wildlife areas, part of a river corridor natural area through the heart of town
-An excellent statement of what Missoula is about (a strong root in nature, living in an urban area but keeping touch, even if one can't hike/ski etc./using motor vehicles to get to such places.)

-Would be frightening to have a bike/ped bridge under existing Orange Street bridge - apprehensive re: safety.

-Want to see California Street Bridge put back into service - would tie the northside and westside onto the riverfront.

-Consider Missoula on Ice demand for bike/ped bridge.

-Consider the experience of walking across the river - should be pleasant (? not possible with underslung bike/ped bridge)

-Contact Save Open Space for individual/group presentation
  - Andy Sponseller

-Use creative engineering to use existing impact zone to meet all needs for the bridge, use existing impact zone.

-Don't want bike/ped bridge underneath
  - not safe
  - will not use
  - just like Orange Street Underpass

-Cantilever ped/bicycle lane away from traffic lanes to facilitate safe usable situation.

-Bike/ped bridge should be part of vehicle bridge- just widen vehicle bridge

-Concerned about losing parking on west side of Clark Fork Riverside

-Also noise level concern if widened closer to Clark Fork Riverside

-Lower the grade of the bridge for easier parks/trails access

-Bike/ped bridge along railroad tracks - Montana Rail Link
-Hang a bike/ped bridge underneath vehicle bridge

-Lower grade of entire structure - Excavate trail lower if lowering grade causes height problems

-What is the overall traffic/transportation for the area/city in general and how does bridge fit into it?

**Comments and sketches placed on maps:**

-Better intersection at Cregg Lane

-Bike ped lane on both side of bridge deck

-Cantilevered bike/ped lane on upstream side of bridge

-Remove Milwaukee Railroad Bridge and lower grade of roadway

-Sling bike/ped bridge under Orange Street Bridge

-Mule deer on the island

-Look at California Street for bike/ped bridge

-Bike/ped bridge along or next to railroad bridge crossing

-More perpendicular access for Cregg Lane

**Written Comments on Comment SheetsReceived Later:**

Besides being a vehicular traffic bottleneck which causes increased car emissions the Orange Street Bridge is the most dangerous bridge in Missoula for bicyclists and pedestrians. Certainly if the roadways and bridges in Missoula were safer they would be more attractive to people who might consider a less polluting mode of transportation such as biking or walking.

The main problem with the bridge is that the shoulder is too narrow to allow for safe bicycle travel. If the pedal of a bicycle should hit the curb (sidewalk) it can throw the cyclist into the lane of traffic as has happened in the past. There should be therefore, a separate, well marked bike lane, possibly separated with a very short curb that a cyclist's pedal would not hit on the downstroke if they got too close to it.

Separation necessary for pedestrians would only require a raised sidewalk and a good handrail such as the Higgins Street Bridge has. Also the sidewalk should be handicap accessible.

There has been some discussion in the past of having a small pedestrian/bicycle bridge separate from the Orange Street Bridge. I feel if this is done it should not replace the bike/pedestrian requirements for the Orange Street Bridge. A separate bridge will be out of view of the main traffic and shops on Orange Street and therefore will be too isolated for most women and children to feel safe walking or riding at night. It would be useful only in the daytime. Also if a tunnel or lowered bridge were suspended under the Orange Street Bridge it would have the same effect. However if a lowered bikeway was attached to the bridge in addition to the bike/pedestrian traffic being served at street level those recreation bicyclists that don't want to climb all the way up to the vehicular traffic level to cross the river could be accommodated.

Another issue that should be carefully considered is maintenance of a second bridge. This includes regular maintenance such as snow removal in winter (a separate bridge would not be a priority over the main streets) and necessary structural repairs. The City would have to carry those additional costs. Other considerations are: 1) The Orange Street Bridge connects to the main street system (cyclists will take the shortest route rather than be routed out of their way). 2) the Orange Street Bridge is a more permanent structure than a smaller separate bridge will be. 3) I believe the state picks up some of the costs for bridges that carry highway traffic (not sure about this)

Functional considerations aside, I personally feel that a separate bridge would add more visual clutter to the river.

One more comment - the drainage grates on the Higgins Avenue Bridge have bars that run parallel to the direction of travel and are spaced apart about the width of a bike tire. Please don't repeat this blunder on the new Orange Street Bridge.

As a citizen of Missoula and resident of the Historic Southside Neighborhood, I hope that:

* We will avoid constructing any pedestrian/bike bridge across the island to connect north shore with south shore Park. Can we not adequately accommodate walkers and bicyclists on the reconstructed Orange Street Bridge itself, and look to a California Street ped/bike bridge for an extended loop in the riverfront parkway system?

* I hope we can, through Orange Street Bridge reconstruction, reduce the Cregg Lane intersection danger by not allowing vehicles to come from Cregg Lane, cross over traffic to head north. Too dangerous!

## *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

### STAKEHOLDER CONCEPT TEAM MEETING No.1

March 1, 1994

### AGENDA

7:00 - 7:10 Welcome and Introductions - City of Missoula

7:10 - 7:20 Process Overview and Agenda - Druyvestein Johnson & Anderson

-Team assignments
-Stakeholder Team responsibilities

7:20 - 7:50 Purpose and Need of Project - Druyvestein Johnson & Anderson

-Full Group Exercise

7:50 - 9:00 Stakeholder Team Work Session

Mapping Exercise

a. Map 1 - Good/ Bad Map (No Secrets)

b. Map 2 - Action Map
- Issues and Concerns
- Immediate and Future

c. Map 3 - Ideal Future Map - (No financial constraints)

9:00 - 9:30 Stakeholder Team Presentations and Discussion

9:30 - 9:45 General Feedback and Discussion

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## *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

### STAKEHOLDER CONCEPT TEAM MEETING No.1

Mapping Exercise

a. **Map 1 - Good/ Bad Map (No Secrets)**

Tell us everything you know about the site. What information do you have concerning ownership, environmental issues, local interests and concerns, development plans, future projects affecting the area, etc.

b. **Map 2 - Action Map**

- Issues and Concerns
- Immediate and Future

What really needs to occur in the short term - long term based on the realities of today and the community needs in the future.

c. **Map 3 - Ideal Future Map - (No financial constraints)**

What would be the ideal solution at this site? What special features would be utilized and how should this site be integrated into the community. Assume that there are no financial constraints.

d. **Stakeholder Team Presentations and Discussion**

Select a person from your group to summarize your findings for tonights session.

After the Teams have prepared the 3 maps, the workshop groups will reconvene and representatives from each will make a 5 minute presentation of their work to the entire group. The group will discuss the maps in order to develop an understanding of common, conflicting and unusual issues and features.

A summary of the results of tonights work session will be prepared for the use of the Stakeholder Teams at our next meeting. This information will be provided to the Stakeholders prior to the next meeting along with a summary of the data received at the first Public Scoping Meeting.

# *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

## STAKEHOLDER TEAM MEETING NO. 1
March 1, 1994

## TEAM MEMBER OBJECTIVES

We need a bridge and local area that provides safe and esthetic fluw of traffic for both vehicles and pedestrians.

I would like to see the riverfront area continue to become more of a bike/ped accessible greenway through Missoula, highlighting the natural aspects of the riverfront as well as providing alternative access to business and recreational facilities.

Transportation lanes developed to provide efficient access from one side of the river to the other, to provide access to alternative means of transportation, and to tie all this in efficiently & aesthetically with existing structures and environment.

Finished bridge/trail area: Gateway between areas
Inviting between areas - no matter what mode
Easy to use no matter what mode
Interconnected bike/ped with trails and street
Protection/enjoyment of river area

This area integrates our need to get around with our need to enjoy recreation and our beautiful surroundings whether we're walking, riding a bike or riding in a car.

An automobile/bicycle/pedestrian bridge and a river-level crossing underneath it, which integrates in style and function wit the elements of nature that define the heart of the urban area. The river and its riparian edge, the natural park and its viewing spots for taking in the hills around town.

In addition to allowing a free flow of a large amount of car and bike traffic across a well made good looking bridge, there will be ways to cross the river away from the traffic which you can hear and watch the water go by.

What should be done is to provide safe bicycle and pedestrian traffic across and along the river and maintain a natural setting.

Providing the Orange Street bridge were to be reconstructed, it should decrease air pollution caused by motorized vehicles, increase traffic flow and not impinge excessively on existing businesses, lands or public facilities.

The improvement or reconstruction of Orange Street bridge that would both allow for increased traffic flow and also accommodate and encourage bicycle and pedestrian access to the riverfront trails system.

To create a river crossing that allows for and encourages crossing by and for pedestrians, autos/trucks, bicycles in a safe, efficient manner, and that is aesthetically pleasing and contributing to the quality of life sought by Missoulians.

Lower Orange Street bridge and put bike/ped crossing under or alongside (need to see design options) the bridge.

We need a river crossing that harmoniously blends motor traffic, pedestrian traffick and bicycle traffic, taking into account diverse user needs and environmental concerns.

I would like to see a functional and aesthetically pleasing bridge structure across the river which accommodates cars, bikes and people.

Try to satisfy all businesses involved with this project.

Protect all business concerned. Be concerned for people rather than roads and bridges.

Replace the existing bridge with a new facility which will:

1. Connect the north and south sides of the river;
2. Eliminate conflicts between motor vehicles, pedestrians, and bicycles;
3. Improve the access to the McCormick Park and future development at Champion site; and
4. Be aesthetically pleasing.

Make the bridge easy for everyone to use.

I would like the area to be attractive and safe.

Do nothing!

Lower the whole bridge leaving room to walk comfortably under it at river level & include bike/ped in one bridge structure.

# *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

## STAKEHOLDER CONCEPT TEAM MEETINGS

MEETING NO. 1 - MARCH 1

Introduction to the Process
Stakeholder Team Mapping Exercise
Issues and Concerns

MEETING NO. 2 - APRIL 5

Refinement of Issues and Concerns
Develop Project Objectives
Setup of Alternative Selection Matrix - Assign weighting factors
Possible Solutions and Development of Preliminary Alternatives

MEETING NO. 3 - MAY 31

Finalize Project Issues and Concerns
Finalize Project Objectives
Refinement of Preliminary Alternatives
Finalize Alternative Selection Matrix
Concept Overview

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# *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*
## MISSOULA REDEVELOPMENT AGENCY - BOARD MEETING
March 15, 1994

During the regular MRA Board Meeting in the City Council Conference Room on March 15, 1994, a presentation was given on the project. While no written comments were submitted at the meeting, the following comment was received later via the telephone:

- With the likelihood of the California Street foot/bike bridge becoming a reality, the bike/ped bridge downtown should be sited east of Orange Street.

## *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*
## MISSOULA DOWNTOWN ASSOCIATION MEETING
March 8, 1994

A meeting with the Missoula Downtown Association was held on March 8 1994 at Zimmonnos banquet room. There were 37 separate comments received and they are compiled as follows:

- prefer a river level bridge on the east side of Orange Street.

- Orange St. exits off I-90 which becomes Orange Street. Businesses on Orange St. would be tremendously affected if you move the bridge up or down stream. The fun of looking over a bridge to the water below would be gone if you put it over the island. A separate pedestrian bridge accessing the trail systems would be great for recreationists.

- Traffic movement with speed.

- Completion of riverfront access to parks north and south sides of the river for all community users.

- Separate bike/ped bridge from Orange St. - low profile ped bridge

- Community involvement area

- Cultural and recreation focal point

- Most important - use this opportunity to create a link in the riverfront trail system. Location east or west is good.

- For bike-ped bridge, should be closest possible to water - not arching clear up as Orange St. bridge now is.

- Safe bike lanes - safe pedestrian lanes

- I am most interested in seeing the vehicle traffic improved across the Orange Street Bridge. This would have to have a separate lane for bicycles and pedestrians.

- I would like to see a four lane bridge for automobiles plus lanes for bikes and sidewalks for peds.

- Make it so that the ped bridge is separate (to the east) of Orange Street. Create Orange St. Bridge to accommodate good in and out for the open area around ice rink area as the remaining area develops.

- Enhance existing bridge - leave island alone - ped usage on east side to be used in conjunction with further developments in the area

- The simplest configuration possible enabling all three modes of transportation (vehicle, bike, ped) access right at the riverfront intersection with Orange. w/o lengthy out-of-the-way detours

- A low, pretty four-lane bridge with good consideration to traffic in and out of McCormick Park. Footbridge not too far to the east.

- Under bridge with bike/ped access enhancing the approach to downtown Missoula.

- Keep bike-ped bridge on east side of Orange Street - maintain pedestrian access to trail directly under Orange Street bridge

- I feel the bike-ped bridge should connect the heart of downtown with the riverfront trail/park system. Logically, the natural south shore park could link with the Caras Park and Central Business District. Another concern is the McCormick Park interchange.

- Widen Orange Street to four lanes w/room for bicycles - take out RR bridge - separate or lower attached foot bridge on Orange Street - bicycle should stay on roadways and not on walkways - purpose of foot bridge is currently to connect the two walking paths on each side of river where there will be future need for tourists to walk from motels to shopping areas across river - more walking causes less pollution - future parking areas may require means to walk to McCormick area or commercial shopping.

- four lane with bike pedestrian attached - no separate bike bridge.

- A bike-ped bridge should seriously be considered west of the existing bridge to facilitate bridge crossings from the St. Patrick Hospital area to the McCormick Park area. I also agree with the stakeholders' opinion that the island should be left alone. A bridge in that area should not open the island to human access. One alternative would be to include bike-ped lanes with the expanded Orange St. bridge in addition to a bike-ped bridge west of the existing bridge.

- Provide a commuter bike lane with the Orange St. Bridge. A bike pedestrian bridge should be located further to the west of the Orange St. Bridge.

- A bridge which allows for the safe transport of all users: vehicles, bicycles and pedestrians.

- Separate bike-ped bridge on east side and Orange Street bridge on lower level to compliment.

- Incorporate the riverfront parks for the ped-bike bridge - eastside

- The bridge needs to be widened to make it safe for bikes, pedestrians, and vehicles making turns to McCormick Park.

- I want bicycles and aesthetics to be primary concerns.

- Include wide shoulders for bicycle traffic.

- Pedestrian bridge must be placed east of Orange Street with access to Front Street. Any bicycle pedestrian bridge that empties on Broadway would be unacceptable due to safety considerations. An east placed bridge would give a very nice continuity to the new trail system. I am speaking as a walker, bicyclist, and a business owner on Front Street. I feel the structure must be built.

- Plant more trees to absorb $CO_2$ and traffic noise.

- Let people walking and cycling interact visually and physically with the river. The island is not sacred. It is to be respected but it is not the single most important thing on the river. P.S. No deer in the city center. P.P.S. I suggest development of a bike/ped origin/destination study - where are we coming from? Where are we going?

- Eliminate old bridge structure and overpass totally. Build a new lower profile bridge for autos - four lane near present pathway its on. Build a new ped/bike bridge (east of new bridge for autos) with pedestal on island if necessary. Maintain trail under old RR overpass, but do not e.g. no tunnel, close it in more than necessary or attempt to keep the design and build such that nothing about area and/or structures, including bridges, is attractive or shelter-providing for transients and/or vagrants. The ped/bike bridge should be a stunning architectural statement, very attractive and much used.

- I would like to see where foot/bike traffic as well as motor traffic can co-exist while creating a beautiful area with the architecture of the bridge

- Would not like foot/bike bridge to be under the main bridge - it would be off putting to children and women, it could attract transients and would not be an attractive viewing point - a bike ped bridge will complete the riverfront trails loop and aid foot/bike commuters to the downtown - it is much needed.

- Twinning and hang bike bridge eliminate RR underpass.

- Concerns about wildlife on island and crossing river. Aesthetically kept natural and traditional.

- Preserve wildlife to insure that those people walking below still have an experience that brings them closer to wildlife - offer them reason for walking there in the first place.

- For Orange Street vehicular bridge replacement: Aesthetics. The current structure(s) are quite ugly. This is very visible and well used area in heart of downtown. Ped/Bicycle: put it in spot that makes most sense considering:
    1. long term development/growth of downtown corridor
    2. will ice rink go at McCormick
    3. Will California St. bridge be revamped for ped/bike use.

Can't we delay bike/ped portion of decision long enough to get clarity on these two? The result might be wasted without this info.

- Biggest interest is to see a Riverfront Trail loop that is completed at the west end of the park system so that walker/bikers do not have to come up out of this special place along the Clark Fork River. Not very interested in seeing this walk/bike bridge connected to the Orange Street Bridge expansion project..... should be separate! California bridge project would have big impact on where I prefer walk/bridge. Now prefer McCormick connection.

## *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*
## NEIGHBORHOOD ASSOCIATIONS JOINT MEETING
### Monday, March 14, 1994

A joint meeting of the McCormick, Southside, and Riverfront Neighborhood Associations was held at the Willard School to discuss the Orange Street Bridge and Riverfront Access Project.

The following attendance figures were taken:

| | |
|---|---|
| McCormick | 11 |
| Southside | 6 |
| Riverfront | 6 |

A total of 25 were in attendance per the sign-up sheet. We received 17 written comments which are summarized below:

-A solution to Cregg Lane intersection with Orange Street. Need for protective railings.
Adequate lighting of new bridge. Make the bicycle and pedestrian lanes a part of the bridge, not suspended below. One suggestion is to have the bicycle lane separate from the pedestrian lane, perhaps one on each side of the bridge. Keep the bridge elevation as it is at present. Work towards a bridge that would satisfy most people, cars, bicycles, and pedestrians.

-Will the needs of the neighborhoods be outweighed by the needs of the Downtown Association and the MRA? The picture painted by the MRA is 2:00 on a sunny afternoon - people walking from the downtown to the park system on a separate bridge connecting via the island next to Orange Street Bridge. What is the picture at 2:00 A.M. when the bars close and the bar crowd is funnelled into the southshore park and out Chestnut Street? It's my opinion that street traffic (pedestrians, bikes) should be restricted to Orange Street and out of the already congested dead end street of Chestnut.

-Think of people first, cars later. Work on roads through and use of old Mill site. More development on Park land for children's use in the summer. Listen to the people who have been around the area awhile and the quiet people, not just business and rush, rush people who miss most of life by hurrying too fast. Think about the long range impacts also.

-Make Orange Street a one-way bridge. Make Higgins a one-way bridge. Don't build a bike-pedestrian bridge. Build a pedestrian railing on existing bridge. Don't lower bridge over pass.

-I feel the Orange Street Bridge should be tied into the overall problem - Malfunction Junction, etc. Think about one-way for Higgins and Orange streets, eliminating several of the stop lights and moving traffic along at an even flow. Your bike/pedestrian routes can pass over the road bridges.

-I think the bicycle and foot bridge should connect onto the main bridge.

-Sorry but how I feel:
I. This evening = a very poor and insulting substitute for public process. An unidentified M.C. controls it totally - Q & A, no discussion, no being brought up to speed re: history of this project, etc. So many uninformed ppl jot down a few words re: 25 different "aspects" of X,Y,Z,---- So poor, insulting, manipulative, all top-down.

II. We need a unified bridge w/ both So. side underpasses preserved. I want no car access to So. side underpass option - NO WAY. Keep cars out of this area. Let them go by streets - or walk - or bike. Let RR bridge negotiating go on for walkers to access Mc Park (ice rink etc.)

III. EIS - yes - if MRA gang insists on this Frankenstein's monster of a sep. bridge.

IV. Re unified bridge - large ped/& sep. protected bike way taken from car space, not intruding into ped. space.

-No separate bicycle/pedestrian structure. Integrate bicycles with appropriate lanes on traffic bridge. Ample pedestrian-only walkways both sides of bridge wit railings and lighting. Lower bridge to eliminate unnecessary climb but still accommodate both trail underpasses to access parks. Borrow ideas for security/esthetics from successful similar "tunnel" projects such as San Antonio River walk. Nothing on Island. traffic signal at Cregg Lane.

-I would like to see built a new 4 lane bridge at Orange. I would like to see the Bike/ped bridge be separate and located more towards McCormick Park and over to possibly the Clinic area, working on the theory that the long term picture of the Missoula Parks system would continue down both North and South shores. I think the Southside path system should be joined at river level to join McCormick Park without having to cross over vehicular traffic. Something needs to be done about the Cregg Street access to Orange Street too. However, I would like to have more input regarding.

-Widen bridge to 4 lanes. Separate bike/ped but attached - lower elevation. Lower or eliminate RR overpass. Improve intersection at Cregg Lane and access to McCormick. Access trails on both sides to Orange Street.

-Lower bridge. Separate pedestrian bicycle bridge. Widen bridge 4 lanes - bike lane one side - pedestrian lane on other side.

## *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*
## SAVE OPEN SPACE INC. MEETING
15 March, 1994

A meeting of Save Open Space Inc. was held at the City Council Conference Room to discuss the Orange Street Bridge and Riverfront Access Project.

There were 18 in attendance and 13 written comments were received, which are summarized below:

- Keep the aesthetics, twin to widen for additional vehicular traffic with railings for pedestrian/bicycle access. have pedestrian access on one side, bicycle on the other to avoid conflicts. Leave the island natural - no separate structure for bicycle access.
* Turning lanes for access to McCormick Park.

- I would like to see better pedestrian and bicycle access on the Orange Street bridge. One possibility would be to make the bridge level sidewalks just for pedestrian and wheelchairs. Rails could be added like on the Higgins bridge and staircases could be added (again like on the Higgins bridge). Then, a bicycle route could be hung from the existing bridge and tied into the stair or ramp access used by pedestrians.

- What I am definitely opposed to is adding a pedestrian/bicycle bridge between Higgins Ave and Orange Street. To build a totally new bridge rather than use and adapt the existing bridges would involve the expenditure of a great deal of money and as far as I can see would only accomplish shortening the distance people have to walk to get across by about 200 feet. It would clutter the open view from the trails in the area and would severely disturb a beautiful natural area centered on the large island in that area.

- Would prefer a 1. separate bicycle/pedestrian bridge or 2. one built underneath the present bridge - next choice would be to widen the existing Orange Street bridge to include 2 separate lanes, one for pedestrians, one for cyclists.

- Please try to use bridges that already exist. Part of the aesthetical appeal of Missoula's Clark Fork River is not having a bridge crossing it every few feet. The pedestrian and bike bridge under the existing Orange Street bridge would be wonderful. Also access to the paths from the bridge would likewise be wonderful. Please try to utilize everything already in existence and not create more expensive projects than are necessary.

- 1. No bridge to the island.
  2. The most important need is for pedestrian/bicycle travel - My sense is that the California site could serve more users.
  3. In any case the planning for this bridge needs to include concerns for a more distant future; one which sees the extension of the river front park system past the next bridge west.

-I am a pedestrian. Orange Street bridge is a very unpleasant bridge to walk across. I favor a separate bike-pedestrian bridge. Make Cregg lane 1 way - from north.

-Put traffic through/under Milwaukee Overpass for least trouble to residential areas. (See sketch)

-There should be a pedestrian/bicyclist bridge separate and distinct from any present or future Orange Street bridge crossing. My first choice for a pedestrian/bicycle bridge would be from McCormick Park to some point on the north side. Second choice would be to have the pedestrian/bicyclist bridge cross immediately upstream from the current Orange Street Bridge. The pedestrian bridge could cross using the "island" upstream from Orange Street Bridge. As far as improvements to Orange Street bridge itself, I am opposed to any improvements that will have the end result of increasing traffic on Orange Street. Rather, I would support diverting the traffic away from Orange Street in order to preserve the residential neighborhood that exists south of the river and orth of 3rd street between Russell Street and Higgins Street. I like the idea of making Orange Street running one way. As was mentioned at this evenings neighborhood meeting. (see Map location for bridge)

-Need to widen Orange Street Bridge to expedite traffic flow. Safety is my primary concern:
1. for bikes: adequate lanes on at least one side. No curbs, no debris, no conflict with pedestrians.
2. for pedestrians: guardrail between the cars and the footway, high lighting intensity.
3. for car: no turnoffs that cross the traffic line. (Cregg Lane, etc.) lights at 3rd? so you can get into you neighborhood.

Single multiple lane structure or dual one-way structures. Access for people to McCormick Park where they don't have to pass through the residential area, i.e. use the railroad underpass? No separate foot/bike bridge to the island. Reasonable cost, just because Federal dollars may be used does not justify a project without limits to the goals it would meet. Do not channel commuters (car, bike, foot) into the park areas. Would a small bridge near the Rail Link bridge benefit people coming/going from Westside/Northside Neighborhoods to McCormick Park area???

-Overysimple: Construct a twin (2 lanes) north of the existing bridge with an extra wide pedestrian lane with a guard rail. Problem: How to have Cregg lane - merge/or intersect with Orange to go in both directions. Note: These meetings are helpful in that we can't come up with a solution until we know all the problems.

-I live on 1st. W. will I still be able to turn onto my street (left turn) after I cross the bridge (coming south)? Will the First St. alley (north side, now ending at the bridge) be deadended? Will the two grey eyesore houses on Orange Street be eliminated.

- If the bridge is due for reconstruction in maybe 1- to 15 years, why spend monies on fixing up the bridge. just replace it now and with the monies that are available now. Get what we need now! Would save money at a later date!

- What I would like to see:
  1. Improved/widened Orange Street bridge with a bike/ped lane. Deal with Cregg lane access.
  2. Separate bridge linking Caras park area with Clark Fork natural park. This bridge would:
     - be for non-motorized traffic only
     - include areas where you could sit and observe the wildlife/birds.
     - Minimal impact on wildlife/birds in area. (away from nesting areas or above them or ........) wouldn't allow access to island.
     - Aesthetically pleasing and subtle lighting.

  3. Whatever project is adopted should add to Riverfront Trail project already underway. Work with the trails - improve access among trails in the system The Orange Street bridge should be improved for access, but no reason for overlooks or vistas on this bridge. It wouldn't be a peaceful spot to sit, whereas a new non-motorized bridge would be. * Also, it would be nice to make the Railroad Bridge usable by peds and bicyclists. In Stowe, VT. they have a wonderful system of trails and bridges along the river. I think it could be used as a wonderful model although I'm sure it was very expensive. I'd rather wee several crossings that weren't as developed than one really deluxe bike/ped bridge. It sets the atmosphere for the town as a whole and encourages non-motorized travel.

- I've seen eagles, osprey, various ducks, etc, using the island across from Caras Park. I would like to see no structure built on or to that island - leave it as a wildlife sanctuary. Orange Street bridge is a really dangerous bridge to cross on foot or bike. I would like to see a separate foot/bike bridge built along side the car bridge, preferably on the McCormick Park side. To better the flow of car traffic, widen the bridge and make a turning lane on the West side for Cregg Lane. Could you put a road in off of Chestnut Street along the old railroad to access the McCormick Park area through the Old Milwaukee RR overpass?? Hum! Probably won't work.

- I am concerned about the lack on inclusion of Conservation/Open lands organizations in this process. If in fact, broadbased citizen input is the basis of this process, then SOS should be represented in the Stakeholder Groups. I believe that this type of process will become the standard for public projects. Hopefully, this project's process will not be colored by particular agendas. * i.e. with an urban perspective.

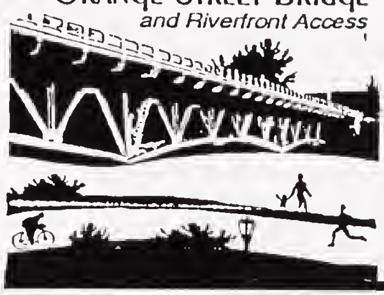
- Promote bike traffic to cut down on commutes. Maintain existing bridge. Build offramps to alleviate congestion at Cregg Lane. Possibly use Milwaukee overpass as entrance to McCormick Park by putting an offramp on the northbound lane that will pass under the bridge.

- Ped, bike path integrated into a ped/bike Master Plan, complete with consistent aesthetics. Separate ped, bike bridge spanning over the island. Separate ped and bike done in Eugene and successful. The ped/bike path needs to be accessible and within proximity of downtown. Bike access to Orange Street can be further back i.e. 1st and Front. but Ped access can drop down from bridge itself. Cregg Lane - definitely needs special consideration thru either access to McCormick Park. (eliminating use of Cregg Lane) More traffic lights on Orange Street. Orange Street Bridge traffic bottleneck - best to resolve the problem right there by pairing or widening the bridge. Consideration of future increased public transportation.

- Concerns - Safer bicycling existing curb situation is frightening - Don't need separate bridge - with more bridges I would worry about visual negative impact. Deck beneath is interesting. Can it be made safe, esp. at night? I think I'd prefer widening. Seems safer for bicycles and peds. Additional ped and bicycle crossing at Rail Link bridge would be great. Interests - Removing old BNRR bridge and leveling the grade seems more user friendly for handicapped, ant others. Also seems to make McCormick Park access easier - if bridge needs replacing in near future (20 years) I'd say replace it.

- Double the main bridge and the railroad overpass, keeping both high enough to make trails/pathways going underneath feel safe and open. Do not put a separate pedestrian/bike bridge east of Orange Street over the island - but one west, connecting with Owen Street, could be acceptable, as would an attached bridge under the Orange Street Bridge. Widen Cregg Lane at the intersection, to enable access to McCormick Park; but don't create a monster there (in size or complexity), figure out how to control traffic at times of potential congestion without having to build too much facility there! Make all the construction support the emphasis on and along the river on its being a natural area attractive as natural.

ORANGE STREET BRIDGE
*and Riverfront Access*



MISSOULA

ORANGE STREET BRIDGE & RIVERFRONT ACCESS PROJECT

# NEWSLETTER

March 1994

## INTRODUCTION

Welcome to the Orange Street Bridge and Riverfront Access Project. This newsletter will be a means of keeping you informed of its progress.

In 1967, Missoula's first Urban Transportation Plan (MUTP) was adopted. It was updated in 1974 and most recently in 1985. In 1990, the Missoula Bridge Needs Study was completed. It included the conditions of, and recommendations for, the Orange Street River Bridge and the old Milwaukee Railroad Overpass. In 1992, the valley-wide Non-Motorized Transportation Plan was completed. Each of these studies has made recommendations for the improvement of the Orange Street corridor.

The Orange Street Bridge and Riverfront Access Project is the culmination of these past efforts. This project has three distinct elements:

1) the river bridge
2) bicycle/pedestrian facilities
3) the old Milwaukee Railroad overpass

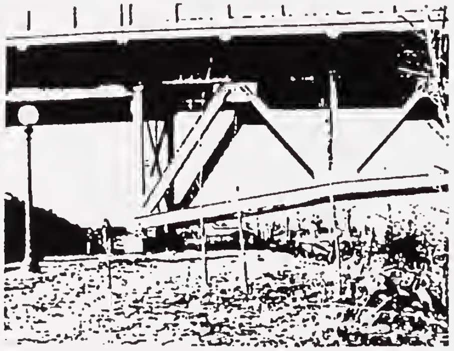
Each of these elements will be analyzed in the development of an Environmental Assessment for the initial phase of this project. The final phase will include detailed construction plans with the construction of the project estimated to begin in the fall of 1995.

We look forward to receiving your input and suggestions.

## NEXT PUBLIC MEETING

**March 30, 1994**
**Wednesday**
**6:30 PM - 9:00 PM**

**Public Scoping Meeting** (Open Forum)
**Roosevelt School**
503 Edith Street
(Wheel chair access is on Stephens Street side of building from the playground)
**Purpose:** to receive input, ideas, issues and concerns from the general public
**Short presentation at 7:30 PM**
Please mark your calendar and plan to participate.



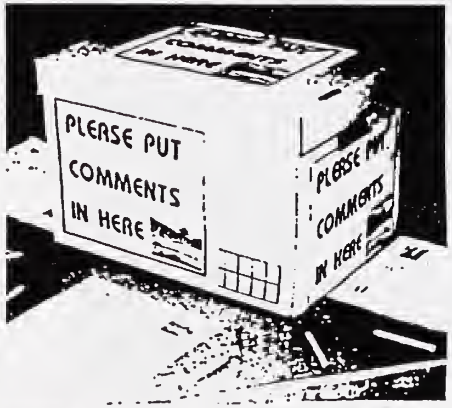
## PROJECT HIGHLIGHTS

The project formally began in February 1994 when the City awarded the contract for the initial phase to the engineering firm of Druyvestein Johnson & Anderson, Missoula, Montana. They are working with several subconsultants, one of which is the nationally acclaimed bridge designers HNTB Corporation of Bellevue, Washington.

This initial phase of the project includes a public involvement program to develop issues, ideas, concerns and alternatives. Thus far in the process, the first Public Scoping meeting was held on February 23. Thanks to those who participated.

Many comments were noted on flipcharts and posted on the walls, location options were submitted and drawn on aerial photographs, anonymous ideas, concerns and suggestions were placed in a closed box, and public involvement in this open forum meeting was lively and interesting.

The first Stakeholder Concept Team Meeting was held on March 1. Each of the three Stakeholder Teams consists of nine volunteers who represent a broad spectrum of affected publics having a stake in what happens with the project.



The purpose of the Stakeholder Concept Teams is to provide assistance in refining issues, concerns and information gained from the open forum public meetings.

The first meeting was a structured brainstorming session that:

1. identified facts, issues and uncovered information about the bridge and the project site

2. compiled potential immediate and long term needs

3. compiled an uninhibited array of possibilities and objectives for the bridge and the project

## ISSUES AND CONCERNS

A preliminary snapshot of some of the recurring issues and concerns that are developing through the public involvement process include (not in any particular order):

Environment
Bicycle/pedestrian access to the riverfront
Bicycle/pedestrian commuters
Safety
Business impacts
McCormick Park/Natural Park
Pollution - air, noise, visual
Single structure vs. multiple
Neighborhood traffic
Trails connections
Aesthetics
Recreation
Cregg Lane
Ice Rink Access
Island/wildlife
Reduce congestion

## SUMMARY OF ALTERNATIVES

Since we are still in the public scoping/data collection process, no alternatives are set forth at this point.

## QUESTIONS AND ANSWERS

The following questions were raised during the short presentation portion of the first public scoping meeting. They are included below for your information:

Q. What is the function of the Advisory Committee?

A. The Technical Advisory Committee is composed of six people, each having expertise in or technical knowledge about the project that a lay person would not necessarily have. The members are:

Joseph L. Aldegarie, P.E., Director of Public Works, City of Missoula
Bruce T. Bender, P.E., City Engineer, City of Missoula
Geoff Badenoch, Director, Missoula Redevelopment Agency
Martin C. Vanmil, P.E., District Construction Supervisor, Montana Department of Transportation
Karen Jaworsky, Bicycle/Pedestrian Coordinator, City of Missoula
Doug Harrison, President, Missoula City Council

Q&A

Q. How were the Advisory Committee members chosen?

A. The members were selected based on their technical expertise and/or specific knowledge of or about the project and the process of bringing the project to fruition. Their jobs include the responsibility to oversee projects of this nature for the community.

Q. Who decided on the constituency of the Stakeholder Concept teams?

A. City Public Works and Engineering officials, the Technical Advisory Committee, the Mayor and City Council, and the engineering firm of Druyvestein Johnson & Anderson worked together to develop the constituency categories for the Stakeholder Concept teams. The objective was to have a broad spectrum of viewpoints from groups with a stake in what happens, while maintaining a reasonable team size for productivity of these working teams. Most of the team members were selected by the groups they represent.

Q. Are there any conservation groups like Open Space on the Stakeholder Concept Teams?

A. Conservation concerns and viewpoints are well represented on the Stakeholder Concept Teams. Most of the team members and the groups they represent, such as Council Members, bicycle groups, neighborhood associations and Parks and Recreation have strong conservation commitments.

Q. What about groups that feel they are not represented on the Stakeholder Concept Teams?

A. The most effective way for groups to be represented in this project is for them and their members or constituents to submit their ideas, issues, suggestions, recommendations and concerns during the public scoping and informational meetings. They can also submit their comments directly to the City of Missoula or to Druyvestein Johnson & Anderson as early in the process as possible to be most effective.

Q. Are the Stakeholder Concept Team meetings open to the public?

A. The Stakeholder Concept Teams are working teams that are highly focused in defined project areas for refinement of issues and concepts. These teams will work on the information gained from the public meetings as well as their combined ideas and recommendations. Their continuity and size is essential in accomplishing these tasks. We therefore would prefer that these teams be allowed to work on their own. Summaries of each Stakeholder Team meeting is available to the public on request.

## Public Involvement Schedule

For your information the following is a schedule of the past, upcoming and future meetings:

| *Work Item* | Feb | Mar | Apr | May | Jun | Jly | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|---|
| Proceed/Public Part. Plan w/City | ⚑ 14Feb | | | | | | | | |
| Advisory Committee Mtgs. | a | a | a | | a | | a | a | |
| Newsletters/Media Contact | ✉ | ✉ | ✉ | | | ✉ | | ✉ | |
| Scoping Meetings | 💡 23Feb | 💡 30Mar | | | | | | | |
| Stakeholder Concept Teams | | ● | ● | ● | | | | | |
| Individual Meetings | — — | — — | — — | — — | — — | — — | — — | — — | — — |
| Informal Public Meetings | | | | ● 11May | | | ● 10Aug | | |
| Public Hearing | | | | | | | | | 17Oct ● |

**If you have any questions or would like to be added to the mailing list for future newsletters, please let us know:**

Joe Aldegarie
Director of Public Works
City of Missoula
435 Ryman
Missoula, MT 59802-4297
523-4621

or

Vaughn Anderson or
Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591
721-4320

ORANGE STREET BRIDGE
*and Riverfront Access*

Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591

SUNDAY, MARCH 27, 1994
MISSOULIAN, MONTANA
SECTION, PAGE C-6

MISSOULA DEPARTMENT OF PUBLIC WORKS

City Project No. 93-073 Project No. STPU 8107(10)

# ORANGE STREET BRIDGE
*and Riverfront Access*

# *PUBLIC SCOPING MEETING*

OPEN FORUM

**Wednesday, March 30, 1994**
**6:30 - 9:00 P.M.**
(Short Presentation at 7:30 P.M.)

**ROOSEVELT SCHOOL GYMNASIUM**
503 Edith Street, Missoula, Montana

[Wheelchair Access is on Stephens Street Side of the Building]

This is the second in a series of public meetings being held to gain input for the improvement of the Orange Street Bridge and the development of bicycle/pedestrian facilities for crossing the Clark Fork River and accessing the parks and trails system along the river.

We'd like to hear from you — opinions or suggestions, comments on environmental matters, access or circulation concerns, safety considerations, problems this project could cause or eliminate, plans that could be affected, or any other related matters you think are appropriate.

Representatives of the engineering firm of Druyvestein Johnson & Anderson and the City of Missoula will be on hand to receive your comments and suggestions.

We hope to see you there!

FOR MORE INFORMATION
or to be placed on the mailing list, contact:

Vaughn Anderson or Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, Montana
721-4320

Joseph Aldegarie
Director of Public Works
435 Ryman
Missoula, Montana
523-4620

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Missoulian, Sunday, March 27, 1994—D-7

399 LEGALS 399

NOTICE

Orange Street Bridge and Riverfront Access Project second public scoping meeting - Wednesday, March 30, 1994, 6:30-9:00 p.m. Open forum (short presentation at 7:30 p.m.) Roosevelt School Gymnasium, 503 Edith Street, Missoula, Montana. Public comment encouraged.
3133 Mar 27 1994

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# GOVERNMENT AT WORK

Here's what's going on this
k in Missoula government:
Who: Missoula City Council
hat: Weekly meeting
hen: 7 p.m. Monday
e: City Council Cham-
Hall, 435 Ryman St.
enda Item: A public
nit building height on
planned unit devel-
nore than two visi-
y point on the
g daylight base-
soula County
ekly meet-
lnesday
County
W.

Top Agenda Item: Decision on the adoption of a land-use plan for the Fort Missoula area.

**Who:** City-County Air Pollution Control Board

**What:** Public hearing

**When:** 7 p.m. Tuesday

**Where:** City Council Chambers, City Hall, 435 Ryman St.

**Top Agenda Item:** To hear comment on proposed changes in air pollution regulations.

**Who:** City of Missoula Public Works Department

**What:** Public hearing

**When:** 6:30-9 p.m. Wednesday

**Where:** Roosevelt School gymnasium, 503 Edith St.

**Top Agenda Item:** To hear comment and offer information regarding proposed changes to the Orange Street Bridge.

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three-day courses.

**The public will have a** chance to scope out ideas for what to do with the Orange Street bridge project Wednesday from 6:30 to 9 p.m. at the Roosevelt School gym, 503 Edith St. For more information, call Vaughn Anderson at Druyvestein Johnson & Anderson, 721-4320 or Joe Aldegarie, city public works, 523-4620.

TUESDAY
MARCH 29, 1994
MISSOULIAN
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# AROUND MISSO

## WEDNESDAY

## PUBLIC EVENTS

MISSOULA COUNTY COMMISSIONERS, weekly public meeting, 1:30 p.m., Room 201, Courthouse Annex, 200 W. Broadway.

MISSOULA CITY COUNCIL committees: Administration and Finance, 3 p.m., council conference room, City Hall, 435 Ryman St.

DEPARTMENT OF PUBLIC WORKS, Orange Street Bridge and Riverfront Access Project, second public meeting, 6:30-9 p.m., open forum (short presentation, 7:30 p.m.), Roosevelt School gymnasium, 503 Edith St. Public comment encouraged.

CHRISTIAN LIFE CENTER, annual

WEDNESDAY
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# *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*
## SCOPING MEETING NO. 2
March 30, 1994

The second public scoping meeting was held on March 30, 1994 from 6:30 p.m. to 9:00 p.m. at the Roosvelt School. There were approximately 50 people who attended and we received over 30 comments. The following is a compilation of the comments received:

### Flipcharts, cards and maps

-I would like a separation or at least markings for bike from pedestrians.

-Bike lanes on bridge - no separate bridge for cyclists

-Get rid of old milwaukee bridge. Fill it in!

-A safe bicycle lane should be provided from downtown to southside neighborhood on New bridge not separate. This is very important to future bike commuting.

-Keep the underpass on the old RR bed, but make the new lowered underpass safe.

-Bikes and pedestrians don't mix.

-Less done to the river, the better.

-Cregg Lane turns are a problem.

-Can noise and exhaust from passing cars be buffered while walking across bridge?

-Bridge decking for bikes.
    Joints can dent bike wheel rim like those on Higgins St. bridge, especially where approaches connect to main spans.
    Grates need to be more compatible than Higgins St. bridge

-important from a cost standpoint (half the cost of a separate bike/ped bridge is the foundation) Therefore, to save money, a car bridge should be bult to accomodate bike/ped at grade crossing. Not a separate bridge.

-Additional excavation in river - environmental impacts?

-What would happen to old piers if not used?

-If lower grade, what happens to natural park environment? Cars are closer and noisier then.

-When designing Bike facilities, pay particular attention to drainage and keeping debris (pebbles, litter, etc.) off the travel surface.

-Lower grade from Orange St. bridge to 1st Street. Add bike/ped access points to the parks on either side of the roadway as shown on the map.

### Written comments.

— I strongly favor a separate vehicle/ped-bike bridges.
  Primary bike trails should be kept off Orange Street.
  Existing bridge should be replaced and covered and kept to 4 lanes.
  Control width of structure so trails underneath don't become tunnels.

— Seeing the river as it flows through downtown Missoula without an additional bridge in sight is very important to the people I know who walk along the river.

— I would like to see the Orange Street Bridge be built to accommodate cars, bicyclists, and pedestrians. I do not want to see a separate bicycle/pedestrian bridge. My main mode of transportation is riding my bicycle and I ride on the streets with the cars. Thank God the bridge is finally being repaired.

— I am very glad that the Orange Street Overpass will be improved. Emphasis, in this process, should be placed on pedestrian and bicycle use and safety. I feel strongly that pedestrian and bicycle traffic across the river in this area should be Integrated into the improved Orange Street Bridge. Missoula, the Clark Fork River, and open space in this area would be very ill-served by an additional structure across the river.

— I feel a separate Bike Pedestrian Footbridge is a desirable alternative for the following reasons:
  1. The separate bridge would have greater use by the public.
  2. A separate bridge would encourage desired uses of both the south shore Park & Caras Park.
  3. A separate bridge would increase the safety of bicyclists & pedestrians crossing the river at the Orange Street.
  4. A separate bridge would give the public the best use experience at river level as opposed to a street level bridge.
  5. Parking issues are better addressed due to the Caras Park & Boone & Crocket Lots.
  6. A separate foot bridge would be an integral part of a trail system. The

trail system would be linked by a separate bridge.

7. A separate footbridge - if designed properly - could be a focal point. Suspension bridges are attractive and unique. I have provided an 8" x 6" photo of a suspension bridge located at McCleod Meadows in Kootenai National Park - British Columbia.
8. A shared vision of the future is to have a trail system on both sides of the river which are linked by bicycle/pedestrian bridges. Van Buren on the East & Orange Street on the west this loop would provide an excellent trail for runners, hikers, walkers, and citizens in wheelchairs.
9. There is a fellow employee who is confined to a wheelchair and would really love to be able to traverse the river on his own instead of in a vehicle.

— I would prefer that we minimize impacts on the river itself. This includes building onto the Island.

If a separate ped. bridge I would prefer it be either attached to the vehicular bridge or placed west of Orange St.

I think any type of combination ped/bike bridge needs to be constructed to keep bikes apart from peds. I would prefer that the bikes use a bike lane on the roadway itself and have a corridor for peds.

How feasible is it to make Orange Street one way?

— I would like to see bridge access for bikes at the river trail level.

— From my experience as a pedestrian, pedestrians and bicyclists don't necessarily mix well. This comes from a perspective of safety and sense of well-being from being startled or distracted in a way that is unsettling and potentially harmful.

Of all components, the river is the most sacred! The more screening from vehicle exhaust, the better! Wasn't Reserve street going to get the honors as the truck route to Hwy 12, once construction was completed on its improvement? (I haven't noticed any fewer/less semi-type traffic.)

— I strongly oppose placement of a pedestrian bridge east of the Orange Street Bridge. I'm concerned about wildlife on the Island being disturbed as well as the negative visual impact of such a bridge from trails along river and from Orange Street Bridge. My first choice for a pedestrian/bike only bridge is to revamp the railroad bridge, w/clear signs and bars to prevent access when train crosses. I do not think that putting in the bridge by Orange St. would hurt downtown business - and I work for an organization that is not only a downtown association member but also fronts on riverfront park - the J.R.Peace Resource Center.

I would like a longer loop (further west downstream) around the riverfront area - and feel I and others can cross @ Orange St. now if needed. It is also important to significantly upgrade the Orange St Bridge to:

1. Have safer crossings for pedest. and for bicycle commuters (I am one).
2. Keep bicycle commuters on the main flow of traffic - do not force them off Orange St. onto a ped/bike bridge.
3. I cross on Orange freq - and see less need for making it 4 lanes, than #1 above, but, acknowledging the need to compensate for growth - strongly support # 1 above along w/↑ to 4 lanes.
4. Make access to and from both sides of riverfront trail by bikes and peds onto/off of Orange, safer and easier.

— Of all the proposals reviewed we feel that an underslung bike/ped bridge is the safest, most effective, and most cost effective, plus, from a biking/hiking standpoint it would be a joy to use. A separate bridge is a definite no-go- especially if it cuts across the Island. We hope that there will be additional studies for underslung bridges on Higgins and Russell.

— Lowering grade seems like a good idea. A separate (lower) bike/ped bridge is a bad idea. Problems with lighting, snow removal, crime, etc. Like the Orange Street Underpass on Steroids. Make the bridge wide enough for a bike lane with separate walkways. A good looking bridge would be nice. All of Missoula's other bridges are strictly utilitarian.

Forget about a separate bike/ped bridge near the Orange Street bridge. Use the money to rebuild the California Street Bridge as bike/ped and extend the rail system to it.

— I would like to see the grade lower and with bike lanes on the bridge as well as Orange Street especially south of the bridge. There should also be access from the street to the river front parks for cyclists and pedes trans. I also prefer a separate bridge for cycles to and pedes trans. A new bridge would be best located west of the existing Orange Street Bridge connecting paths on both sides of the river and avoiding any conflict that would arise if a bridge was planned near the island east of the existing bridge.

- I favor a pedestrian/bike/foot bridge adjacent to or near the Orange St Bridge. If one could reasonably be constructed adjacent to the car bridge that might be preferable from an environmental stand point. But I think that a sound design could be done to put a foot bridge over the island to the East of Orange St. As a frequent user of the trail system on the south side of the river (who happens to live on the north side), I would appreciate and use a foot bridge along the river. It is not necessarily safe and/or certainly not convenient to get to the car bridges at Monroe, Higgins or Orange Sts.

- One bridge for cars, bikes and pedestrians, built w/adequate protection or dividers between the three use areas. If possible, modify the existing bridge to these uses. Please don't do anything to encourage more use of Orange & Stephens. There is already way to much traffic feeding onto Stephens, which is, after all, a residential street! Above all, encourage pedestrian traffic. Thanks!

- I personally would like to see the following:
  1) Lower the bridge to the natural grade
  2) provide a commuter bike lane on the main traffic bridge
  3) attach a bike/ped bridge to allow recreational use with attractive turn outs, lighting, etc. for leisure activity.
  4) Combine the two for the lowest impact environmentally, visually, noise, etc. to the area.

  Thank you for your professionalism and credible process.

- Have bridge be a little old-fashioned looking - not a mass of blocky concrete. Gentle lines, easy views of river - maybe w/slender, graceful lights - like the top view of bridge pictures on bottom left - though it's supporting legs are too massive - seek the most inconspic presence possible to respect natural corridor.

- lower Milwaukee overpass 5 - 10 feet
  widen car bridge to 4 lanes and turning lane
  separate bike-ped bridge east of bridge to blend in w/trail system

- Please go light on the people, wildlife, and river! Be creative and use existing corridors (present bridges or former sites ex.Calif.) and we have an opportunity to do well. Strong support for an extra bridge like belw. Higgins and Orange St. historically has been more myth than reality. Community and life isn't grown on HARSH POWER MOVES. I think public support and HARMONY will best come from an HONEST and open process. There is abundant wildlife that has a "Refuge" presently and future generations need this gift. I can support various options around existing corridors. For ex: Orange St. Bridge.

- For this process to work with integrity, there must be a way for the ensuing public discussion to be formed around asking good questions. Let examination of ideas. Values and preferences be thorough, honest, open and constructive. Any preference selected will have costs: those advocating preferences must vigorously question those preferences with the rest of us involved in the process.

  Don't let preferences be something people need to defend. Rather, have them be something to be explored. You cannot emphasize that enough.

## *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

### STAKEHOLDER CONCEPT TEAM MEETING No. 2
April 5, 1994

### AGENDA

7:00 - 7:10 Welcome and Agenda Review
    Meeting Schedule - May 31?

7:10 - 7:30 Site Visit and Summary of Concerns

7:30 - 7:40 Team Assignments for Work Session

7:40 - 9:00 Stakeholder Team Work Session

a. **Refine and List Issues and Concerns/Objectives**

| Issues/Concerns | Project Objectives |
|---|---|

b. **Alternative Selection Matrix**
    Matrix Composition
    Assign Weighting Factors

c. **Development of Preliminary Concepts**
    Bridge Concepts
    Roadway Typical Sections

9:00 - 9:30 Stakeholder Team Presentations and Discussion

9:30 - 9:45 General Feedback and Discussion

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## *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

### STAKEHOLDER CONCEPT TEAM MEETING No.2
April 5, 1994

### Work Exercise

### a. Refine and List Issues and Concerns/Objectives

Please list the main issues and concerns that must be addressed by this project and the proposed project objective associated with each issue.

| Issues/Concerns | Project Objectives |
|---|---|
| (Needs to be resolved) | (How to best resolve) |

### b. Alternative Selection Matrix

Matrix Selection Items

Develop list of items that should be included in the selection matrix. The list of items provided are the items that are required by the NEPA process in the development of the Environmental Assessment. List those additional items that your team feels should be included in the selection process.

Assign Weighting Factors

On a scale of 1 to 5, place a weighting factor as to the importance of each element of the matrix to the proposed project. The highest importance to be 5 and the lowest 1.

### c. Possible Solutions and Development of Preliminary Concepts

From the sketches that are provided, select the 5 bridge concepts that are most appealing to your group and list reasons for selection. Also select the preferred typical section layout and list reasons for your selection.

### d. Stakeholder Team Presentations and Discussion

Select a person from your team to summarize your findings for tonights session.

A summary of the results of tonights work session will be prepared for the use of the Stakeholder Teams at our next meeting. This information will be provided to the Stakeholders prior to the next meeting along with a compilation of the data received at the Public Meetings.

# ORANGE STREET BRIDGE and RIVERFRONT ACCESS
# STAKEHOLDER TEAM MEETING NO. 2
## Summary
April 5, 1994

Summary of the comments and recommendations for the issues/concerns and project objectives.

| Issues/Concerns | Project Objectives |
|---|---|
| **Safety** | Enhance Safety |
| Cregg Lane Intersection | Redesign Intersection - Esp. left turns |
| Cregg Lane | Safe, efficient , neighborhood integrity- on/off design (ramp, clover leaf) |
| Intersection/Cregg lane | Rework Front street access<br>Improve egress/ingress to Cregg lane |
| Bike/ped traffic | Plan for different bicycle users and pedestrian users<br>Separate traffic from bike/ped traffic<br>Separate bike/ped traffic |
| Traffic Flow (Motor Vehicle) | Plan improvements as part of overall traffic plan: corridors, downtown.<br>One way traffic (lessens necessity for widening)<br>Dealing with intersections<br>Possibility of median |
| Lighting | |
| **Access/River Crossing** | |
| Motor Vehicle | |
| Main/Front/Broadway Congestion | Traffic Engineer Plan |
| Bicycle | |
| Casual, children | Convenient connections between roadway and trail system. (bike/ped) |
| Recreation | Separation, safe |
| Experienced commuters | Provide improved access points |
| Bike - Commuter | Wide, clean, safe and well maintained shoulder |
| Pedestrian/Wheelchair | |
| Pedestrian | |
| Wheelchair | Same as bike/ped, easy access, safe |
| Trail/Parks | Several, easy |
| "Other" Disabled | Safe |
| Business | Safe, easy, slow |
| **Environmental - Wildlife** | Protect wildlife, minimum or no impact on island and Clark Fork Natl Park<br>Create Wildlife Corridor |
| Wildlife | |
| Fish | |
| Island Habitat/Refuge | Reduce need for new piers |
| Riparian Areas | |
| Nesting Area | |
| Aesthetic | |
| Impact of more people in proximity | |
| **Environmental - Other** | |
| Hydrology - Bridge piers | |
| Air Quality - Noise | |
| Water | Drainage from bridge, Construction techniques, streamflow. Develop vegetation, construct whitewater |
| Air Pollution | Traffic flow Plan - Good Bikeway |
| Noise levels | Landscaping buffering |
| Noise Pollution | Move state Hwy system off Orange St.<br>Separate "Motor traffic from River/Park |
| **Park Impacts** | |
| -Skating rink - ropes course | |
| -Increase traffic to and thru | |
| -Increased use | |
| -Lighting | |
| -Caras-Clark Fork Natural - McCormick | Access and use of parks or mitigate impacts |
| **Aesthetics** | |
| Bridge | Design "light", airy, open, graceful |
| Landscape | Natural vs "Concrete", Rocks/Boulders/ Green on and around bridge |
| Human Scale/ Aesthetic values | Design in relation to human scale both on bridge and from other points |
| Visual Viewpoints | Enhanced view of bridge - aesthetic elements - older style bridges |

| | |
|---|---|
| (both on river and from bridge) | and view from bridge |
| Bridge Design should be Sensitive to Environment | No separate piers or bridges<br>Env. sensitive design of bridge<br>Reduce fill slopes - lower bridge<br>Maintain clearance under Milwaukee bridge<br>Maintain Island system |
| Construction | |
| Time/Business | Construction Management & Season (during slow business) |
| Interruption | |
| No Gas in 40 years | Flexibility in Design |
| Combined Bridge | Separate bike/ped bridge underneath<br>Adequate width to accommodate all on same level |
| Separate Trails System and Transportation Issues | upper/lower level bridge |

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### *ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*
### KIWANIS
April 5, 1994

The program for the Kiwanis Luncheon at the Village Red Lion on April 5, 1994 was the Orange Street Bridge and Riverfront Access Project.

The attendance head count at the luncheon was 80 and the following written comments were received:

- Regarding a tunnel at the railroad overpass: remember there has been poor experience with a tunnel under the tracks at the Van Buren bridge. Also the Orange Street underpass is no longer considered suitable pedestrian access to the northside. Another tunnel is not a good option.

- Any change of the existing system would be positive!

- I feel that the bridge must incorporate a bicycle pathway. The City needs to encourage bicycle use which will reduce pollution. The current bridge is dangerous. Nice presentation.

### *ORANGE STREET BRIDGE and RIVERFRONT ACCESS PROJECT*

STAKEHOLDER CONCEPT TEAM MEETING No. 3
April 26, 1994

## AGENDA

| | |
|---|---|
| 7:00 - 7:10 | Welcome and Agenda Review<br>Meeting Schedule - May 31? |
| 7:10 - 7:20 | Alternative Selection Matrix Review |
| 7:20 - 7:40 | Issues and Concern/Objectives - Alternative Selection Matrix |
| 7:40 - 8:20 | Stakeholder Team Work Session |
| a. | Finalize Alternative Selection Matrix Weighting Factors |
| 8:20 - 8:30 | Stakeholder Team Presentations and Discussion |
| 8:30 - 9:30 | Development of Preliminary Concepts<br>Engineering and Regulatory Constraints<br>Project Objectives Constraints<br>Bridge Concepts |
| 9:30 - 9:45 | General Feedback and Discussion |

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## *Special Group Meeting*

## *Eagle Watch Estates*

*May 9, 1994*

- *Would like a concrete pedestrian separator barrier from bicycles and vehicles.*

- *Want both*
  1. *Commuter crossing*
  2. *Recreational crossing*

- *Separate bridge (Close to traffic) but on traffic level.*

- *If a separate bridge is put in, it should be at the California Street Site.*

- *No underslung bridge - unsafe.*

- *Want to be up with traffic.*

- *Make sidewalk on bridge wide enough so you are not so close to traffic.*

- *Russell Street Bridge STINKS!*

- *Photos liked*
  1. *NW photo from St. Paul Minnesota*
  2. *NE photo from St. Paul Minnesota*
  3. *Kansas City Plaza Bridge*

- *Slope of sidewalk on bridge - do not slope inward to traffic lanes - rather slope outward.*

- *Extend railings on approaches down to level grade - use curb cuts.*

- *Have pedestrian sidewalks wide enough for snow removal and maintenance.*

- *No separate bridge on island complex.*

- *Anything but an underslung bridge.*

- *Safety and security concerns*

- *Community policing aroung bridge needed.*

- *Transient and human activity deter wildlife.*

- *Emergency communications on bridge - need loops*

- *Main concern is safety*

ORANGE STREET BRIDGE
*and Riverfront Access*

MISSOULA

ORANGE STREET BRIDGE & RIVERFRONT ACCESS PROJECT

# NEWSLETTER

April 1994

## INTRODUCTION

The Public Scoping (strictly information gathering) portion of the Orange Street Bridge and Riverfront Access Project has been completed. The project is now moving into the informational portion — the public comment that was received is analyzed, summarized and will be presented back to the public at the upcoming informal informational meetings.

The purpose of this issue of the project newsletter is to provide you with:

- ☐ an update of project activities
- ☐ a brief recap of public comments to date
- ☐ a summary of the issues, concerns and alternatives that are developing based on the interest shown through public comment
- ☐ a question and answer section
- ☐ the date, time and place of the next public meeting

We encourage your participation at the May 11 Informal Public Informational Meeting (6:30 p.m., Roosevelt School, 503 Edith Street). Not only will information, alternatives, regulatory and design constraints, and limiting factors be presented, but more importantly, public comment on this information will be received. This, again is an opportunity to provide input, ideas and recommendations.

## NEXT PUBLIC MEETING

**May 11, 1994**
**Wednesday**
**6:30 PM - 9:00 PM**

**Informal Public Informational Meeting**
(Open Forum)
**Roosevelt School**
503 Edith Street
(Wheel chair access is on Stephens Street side of building from the playground)
**Purpose:** to present alternatives and options and to receive public comments
**Short Presentation at 7:30 PM**
Please mark your calendar and plan to participate.

## PROJECT HIGHLIGHTS

The second Public Scoping Meeting was held on March 30, 1994 with comments, concerns, issues and ideas being received. The second Stakeholder Concept Team meeting was held on April 5. At the team members' request, there was an extra meeting on April 26. The teams reviewed all public scoping information gathered to date, refined the project issues and concerns, began looking at preliminary concepts and alternatives, and began to develop criteria to evaluate the alternatives.

## ISSUES AND CONCERNS

Based on comments received to date, listed below are the areas of interest regarding issues and concerns in descending order of responses from the public. As these are developing areas of project issues and concerns, we would like additional comment on them and any other areas.

Safety/Conflicts
Cregg Lane Intersection
Aesthetics/Visual Viewpoints
Access to Parks/Riverfront
Bike Lanes
Conserve/Preserve Natural Character
Separate Bicycle/Pedestrian Traffic
Traffic Flow
Environmental/River Impacts
Wildlife
Trail Loops in Town
Costs
Noise/Acoustical
People
Businesses
Neighborhoods - Keep Traffic Out
Commuter vs. Recreational Biker
Orange Street One-Way
Transients
River Level Bridge to Maximize Trails
Easy to Use/Functional Efficiency
Air Pollution
Twinning Existing Bridge
Bike Commuters in Main Traffic Flow
Recreation
Lighting
Wheelchair Access
Missoula On Ice Demand for Bike/Ped Bridge
Traffic Under RR Overpass to Parks
Consider Previous Public Involvement History
Parking on West Side of Clark Fork Riverside

## SUMMARY OF ALTERNATIVES

The alternatives appear to be developing along the following lines:

**1.** **Combined Bridge** (one structure) with:

- ☐ widening to eliminate congestion bottleneck, and
- ☐ bike commuter lanes

A) Pedestrian walkway also on widened bridge but separated from vehicle and bike traffic, OR

B) Casual bike/ped bridge positioned under vehicle bridge

**2.** **Separate bike/ped bridge** (multiple structures). The vehicle bridge would be the same as #1 above. In addition to the vehicle bridge, a separate structure:

A) Casual bike/ped bridge to the east across the Island, connecting Clark Fork Natural Park to Caras Park with NO ACCESS to Island, OR

B) Casual bike/ped bridge to the west over narrow part of river - connecting McCormick Park to north side, OR

C) Casual bike/ped bridge at the Montana Rail Link Railroad Bridge - connecting McCormick Park to north side, OR

D) Casual bike/ped bridge at California Street - while public comment has presented this as an option, the City of Missoula is pursuing this as a separate project on its own merits.

## QUESTIONS AND ANSWERS

Q. *Will there be bike lanes on the Improved Orange Street vehicle bridge for bicycle commuters?*

A. There is considerable interest in separate treatment for two distinct types of bicycle riders -commuters and casual bikers (recreational, children and so forth). Air quality improvement will result from increased non-motorized transportation - citizens switching from cars and trucks to walking or biking if it was made safer and more convenient. Therefore, bike lanes on the Improved Orange Street vehicle bridge will be included as part of the improvement.

Q. *At the Public Scoping Meetings, why was there not an "open microphone" situation?*

A. A critical objective of the project is to receive a broad spectrum of public involvement. All citizens should have the opportunity to be heard on their issues and concerns. Experience shows that an open microphone situation tends to stifle rather than promote full public participation because:

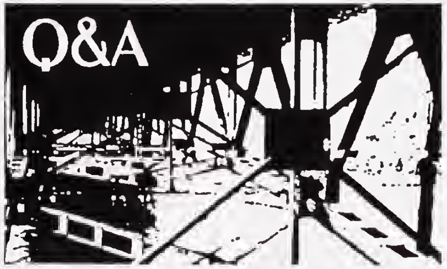
☐ special interests experienced with a microphone in hand or at a podium may tend to dominate discussion and "stack the deck" in their favor

☐ many of us are not necessarily comfortable speaking in front of a group and prefer to exchange ideas on a one-to-one basis

☐ legitimate viewpoints can be "shouted down" or intimidated from full expression by peer pressure or vocal opposition

☐ neighbors may disagree but may not want to do so in a public forum to maintain neighborhood harmony

These are some of the reasons there was no open microphone. As it is structured — open forum, one-on-one conversation, with no open mike; all interested parties, including special interest groups, have the full and unimpeded opportunity to express their views; submit their comments, suggestions and ideas; and to ask pertinent questions about project aspects that affect them and others.



Q. *Can the former California Street Bridge site be considered for a separate bicycle/pedestrian bridge?*

A. The City of Missoula has a separate project for the construction of a bike/ped bridge at the California Street site. Therefore, it is beyond the scope of this project to analyze in depth a California Street option. However, we are very much interested in receiving comments regarding this as an alternative as it relates to this project.

Q. *A significant number of citizens indicate interest in a separate bicycle/pedestrian bridge across the river. If this were to be located across the island (with a pier on the island) between Orange Street and Higgins Avenue, would this invite public access to the island?*

A. Most citizens that favor this option also favor no public access to the island; simply a crossing with no stairs, ramps or other means to the island itself. Furthermore, the 100 year floodplain considerations would require substantial height for such a bridge (possibly 15 feet or more) again impeding access. Pier configuration can be designed to prohibit island access also. Hence, such a separate bicycle/pedestrian bridge would not allow public access to the island.

Q. *Where do we go from here?*

A. The first Informal Public Informational Meeting will be held on May 11. At this meeting rough sketches of possible alternatives will be presented. The public will be requested to provide comment on these and the developing project issues. As contrasted with the purely information-gathering Scoping Meetings, the Informational Meetings will begin to solidify and present the alternatives and focus in on the major issues. They will provide and present much more information and ask for comment on these more specific ideas and concepts.

## Public Involvement Schedule

For your information the following is a schedule of the past, upcoming and future meetings:

| *Work Item* | Feb | Mar | Apr | May | Jun | Jly | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|---|
| **Proceed/Public Part. Plan w/City** | ⚑ 14Feb | | | | | | | | |
| **Advisory Committee Mtgs.** | a | a | a | | a | | a | a | |
| **Newsletters/Media Contact** | ✉ | ✉ | ✉ | | | ✉ | | ✉ | |
| **Scoping Meetings** | 💡 23Feb | 💡 30Mar | | | | | | | |
| **Stakeholder Concept Teams** | | 👥 | 👥 | 👥 | | | | | |
| **Individual Meetings** | – – | – – | – – | – – | – – | – – | – – | – – | – |
| **Informal Public Meetings** | | | | ▣ 11May | | | ▣ 10Aug | | |
| **Public Hearing** | | | | | | | | | 17Oct ● |

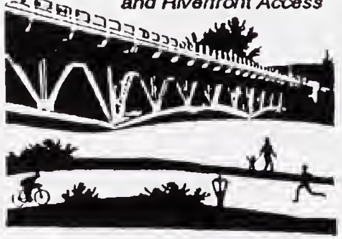
**If you have any questions or would like to be added to the mailing list for future newsletters, please let us know:**

Joe Aldegorle
Director of Public Works
City of Missoula
435 Ryman
Missoula, MT 59802-4297
523-4621

or

Vaughn Anderson or
Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591
721-4320

ORANGE STREET BRIDGE
*and Riverfront Access*



Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591

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Project No. STPU 8107(10)

ORANGE STREET BRIDGE
and Riverfront Access

# INFORMAL PUBLIC INFORMATIONAL MEETING

OPEN FORUM
Wednesday, May 11, 1994
6:30-9:00 P.M.
(Short Presentation at 7:30 P.M.)

ROOSEVELT SCHOOL GYMNASIUM
503 Edith Street, Missoula, Montana
(Wheelchair Access is on Stephens Street Side of the Building)

The Public Scoping (strictly information-gathering) portion of the Orange Street Bridge and Riverfront Access Project has been completed. The project is now moving into the informational portion—the public comment that was received, has been analyzed, summarized and will be presented back to the public at the upcoming informational meeting.

We encourage your participation at the May 11 Informal Public Informational Meeting. Not only will information, alternatives, regulatory and design constraints, and limiting factors be presented, but more importantly, public comment on this information will be received. Again, this is an opportunity to provide input, ideas and recommendations.

Representatives of the engineering firm of Druyvestein Johnson & Anderson and the City of Missoula will be on hand to receive your comments and suggestions.

We hope to see you there!

FOR MORE INFORMATION
or to be placed on the mailing list, contact:

Vaughn Anderson or Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, Montana
721-4320

Joseph L. Aldegarie
Director of Public Works
435 Ryman
Missoula, Montana
523-4620

SUNDAY
MAY 8, 1994
MISSOULIAN
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# AROUND MISSOULA

## WEDNESDAY

### PUBLIC EVENTS

MISSOULA CITY COUNCIL committees: Subcommittee on Zoning Definition of Family, 9 a.m.; Administration and Finance, 3 p.m., council conference room, City Hall, 435 Ryman St.

OFFICE OF COMMUNITY DEVELOPMENT, noon-1:30 p.m., council conference room, City Hall, 435 Ryman. Agenda: Fort Missoula plan.

MISSOULA COUNTY COMMISSIONERS, weekly meeting, 1:30 p.m., Room 201, Courthouse Annex, 200 W. Broadway.

MISSOULA DESIGN REVIEW BOARD, 7:30 p.m., council chambers, City Hall, 435 Ryman St.

MISSOULA DEPARTMENT OF PUBLIC WORKS, Orange Street Bridge and Riverfront Access Project, Informational meeting, 6:30-9 p.m., Roosevelt School, 503 Edith St. Call Vaughn Anderson, 721-4320 or Joe Aldegarie, 523-4620.

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WEDNESDAY
MAY 11, 1994
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PAGE B-3

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C-6—Missoulian, Sunday, May 8, 1994

## 399 LEGALS

Notices under this classification are required by law to be run in a newspaper of general circulation. A notarized proof of publication will be provided for all notices. Some notices may require prepayment. The submittal deadline is 4 p.m. three days in advance. The Missoulian will accept responsibility for printing errors on the first publication only. If you have questions, please call Debbie, 523-5200 or 1-800-332-4212 ext. 278

NOTICE INVITING PROPOSALS

## 399 LEGALS

NOTICE OF SCHOOL ELECTION

Notice is hereby given that on Tuesday, May 24, 1994 a School Election will be held in the Frenchtown School District #40. The polls will be open at 7:00 a.m. and continue to be open until 8:00 p.m. on election day.

Absentee ballots will be available May 13, 1994. You may apply for an absentee ballot either in person or by mail from the Missoula County Elections Office at the Missoula County Courthouse Annex.

## 399 LEGALS

Notices under this classification are required by law to be run in a newspaper of general circulation. A notarized proof of publication will be provided for all notices. Some notices may require prepayment. The submittal deadline is 4 p.m. three days in advance. The Missoulian will accept responsibility for printing errors on the first publication only. If you have questions, please call Debbie, 523-5200 or 1-800-332-4212 ext. [illegible]

## 399 LEGALS

NOTICE

The Montana Department of Transportation will accept sealed bids up until 3:00 p.m. May 11, 1994 for producing a video tape of approximately 10 to 12 minutes in length on transit systems in Montana including rural and urban public transportation and transportation for the elderly and persons with disabilities.

A copy of the bid package may be obtained by contacting Dave Tredik at (406) 444-4265 in [illegible] and requesting Bid Packet [illegible]

## 399 LEGALS

NOTICE

Orange Street Bridge and Riverfront Access Project Informal Public Informational Meeting—Wednesday, May 11, 1994—6:30-9:00 p.m. Open forum (short presentation at 7:30 p.m.)—Roosevelt Gymnasium, 503 Edith Street, Missoula, Montana. Public comment encouraged. [illegible] May 8, 1994

CITATION
Cause No. X-[illegible]

# ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT

## INFORMAL PUBLIC INFORMATIONAL MEETING No. 1

Wednesday, May 11, 1994

The following comments were received at the first Public Informational Meeting held at the Roosevelt School from 6:30 p.m. to 9:00 p.m..

— I like the idea of a separate bike/pedestrian bridge located a "D". It would complete a loop for recreationalists and also provide access to softball parks, pool, and proposed ice rink for people on foot and bike.

— Glad to see the engineering firms' comments from the last City Council meeting, ie - acknowledging the Council resolution against a separate bridge between Orange Street & Higgins Avenue bridges. I think that the Council's resolution is a true reflection of community sentiment against a separate bridge in that area and more specifically against a bridge intruding in any way on the natural islands in that part of the river.

I am strongly against any impacts on those islands and was very worried that that option was going to be "folded in" to the "preferred alternative" of other needed improvements and presented to the Council as a package - take it or leave it".

— If we're going to cut up the view of the river with another bridge, let's have a good reason to do it. A separate bridge between Higgins and Orange Street Bridges is entirely unnecessary and a waste of tax-increment money.

If a bike-ped bridge is needed to get people, especially kids, from the west and north side neighborhoods into McCormick Park (ice rink access) why not add onto or next tot he existing railroad bridge?

— In light of the various public processes over the past few years regarding a separate bicycle/pedestrian bridge; and considering the City Council's recent action; I think any separate bridge between Higgins and Orange will be doomed, and will be seen as an attempt to "slide one through" against the wishes of the public.

— The engineering firm is doing an excellent job with the public. Thanks!

— One bridge/Orange Street/ with ped/bike alternatives seems the best to me -
(inside or under)

So far, the need to spend several hundred thousand $$ on a separate bridge doesn't seem compelling.

— I feel that the City Council's pre-emptive action in excluding the Clark Fork Island from any "development" consideration undermines the Publics' faith in the earnestness in Councils' enthusiasm to allow the Public to participate in the planning of significant public improvements and development.

This public process (ie. this evening) should have been allowed to run to completion before they decided to preclude any alternatives. Let the public speak to the issues, then decide.

— As far as the bicycle/ped bridge goes, if the plan is to build it alongside the Orange Street Bridge - instead of building it on the east side of the bridge, why not on the west side?

There is so much traffic on the east side of the bridge already and parking is at a premium as that side caters to residential usage only. Why not have access on and off a pedestrian bridge by McCormick Park instead of where these is more parking and no residential congestion? Also, it will encourage more park usage.

My house is on the east side of Orange Street right by the Clark Fork foot path entrance and the amount of traffic there already has made for a less private neighborhood. I would appreciate any consideration you can give to this request. Thank you.

— I was very happy about the resolution to not build a bridge across the islands. Many thanks to Marilyn Craig (sic) and the City Council members who voted for the resolution.

— I feel that we so not need any more bridges within the City. Any bridge that is added will negatively impact natural vegetation/wildlife/the scenery/ etc. There are many possible ways of improving bicycle/pedestrian travel across the River without building a new bridge. Orange Street Bridge will be rebuilt anyway and can be expanded to better accommodate bikes and people and resolve all simply.

— 1. Would like copy of info an bridge drawings and cost analysis.

2. Cost analysis of stand alone bridge w/pedestrian crossings should include cost of bringing trail up to bridge level.

3. Process should continue to consider east side bike-ped. bridge as significant public input supports that option. Argument that 2/3 of comment opposes option misses the point. Did any other specific option receive 1/3 support? The process cannot be considered legitimate if the east side option is not submitted to the criteria analysis.

— I favor keeping Orange Street Bridge 2 lanes, possibly with center emergency vehicle/turn lane, which could be an alternative direction traffic lane during "rush hours" with no turns allowed at those times.

Avoid "bottleneck" onto bridge by requiring right approaching lanes to turn right at each of several streets coming up to bridge - use physical barriers. *(surely Missoula can come up with something better?)* Widening roads to accommodate traffic invites increased traffic: see, eg., Los Angeles for clarification, enlightenment.

Monorail or other attractive high-speed commuter line Hamilton to Whitefish. Initially, perhaps, Lolo to downtown Missoula suing existing rail corridor, with park and ride (free ? to commuters as an incentive and traffic/pollution mitigation measure), free or low cost small electric vehicles for city travel eg. from station to work to store to station; anything would need to be attractive to compete w/car.

Existing railway bridge west of Orange could add bicycle and pedestrian facilities - already functions as an attractive alternative to Orange Street Bridge.

No Missoula on Ice in McCormick Park. better at the Mall or ?? WalMart??

Increased # of lanes on bridge will increase load, will require greater upgrade on total rebuild, and will further erode quality of life (and property values?) for residents of the area. Don't ram it down our throats please.

— Definitely NO MORE than 1 structure (not counting CAL or MRL)

If signalizing Cregg Lane, consider No left turns at rush hour.

Lanes for bikes a MUST, but the interface off the bridge is a critical issue.

Lanes need to be cleaned better - no physical separation on bridge.

Hey - can MRL be leveraged by an attached bridge that diverts current traffic onto a safer bridge?

We need to see (in your graphics) the implications of the wider bridges on e.g. under the trails, or a suspended ped/bike bridge.

The best way to serve commuter bikes is to leave as is and remove cars.

How does increased traffic (the result of increased car lanes) interact with Malfunction Junction, downtown and the other key areas?

Where is the option which addresses trip and occupancy reduction? CMAQ money goes for air quality NOT traffic flow!

— River bank level crossing for pedestrians and bicycles is critical. When the trail system is complete, over 1,000 bicycles will be traversing this area per hour at peak times. Please plan for these volumes and encourage bicycle and pedestrian use of the riverfront.

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## CLIP BOARD INFORMATION

— Show alternatives using existing structures

— Show alternatives with pedestrian next to bridge

— One-way streets Higgins and Orange

— Study corridor and connection California and University Bridge

— Half size handouts of bridge concepts

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(LARGE SHEETS)

Sheet 1. Lower than present to tie in to trails - High enough to accommodate river thru - trail.

Bike/ped same level as car deck

- Cantilever - Yes!
- Financially Prudentl
- Allows for Wildlife watch from Ped lane

Sheet 2. Utilizing public input to shape projects is important. As this type of process becomes refined it will be the undisputed standard for ALL types of public endeavors.

Sheet 3. — Representative of Missoula's New Party -
The New Party would rather the Pedestrian bike bridge be further up into north Missoula, so as not to interfere with the Eco System at Orange & Higgins Islands. Also to give low income and elderly residents an easy access to business areas and there is already a bridge in the Islands.

— We should start a precedent of integrating motorized and non-motorized transportation routes whenever a facilities are built or re-built. Cars, bikes, wheelchairs, and pedestrians should all be sharing the roadways and bridges whenever possible. No separate bridge between Higgins and Orange.

*ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT*

## CHAMBER OF COMMERCE, CONVENTION AND VISITORS BUREAU
Presentation Booth

Tuesday, May 17, 1994

The following comments were received at the presentation booth for the Chamber of Commerce, Convention and Visitors Bureau noon conference:

— Absolutely no trail bridges!! Use bridge that includes bike lanes, sidewalk and traffic all on one bridge, on the top - NOT under! Use proposed road bridge typical design - save money - do not waste anymore money needlessly!

This bridge would be more cost effective and safer -

Thanks for doing an enthusiastic and good job - keep getting people involvement and use good sense -

— This project is much needed! Less traffic - plus less carbon monoxide - it will be a real blessing when completed!

What can I do to help?

— 1. go with a Trail or Walk bridge east of the Orange Street Bridge

2. Build a bridge with some character or style that fits the "older" look of the downtown area

Styles & Price considerations - Trail Bridge #10
Road Bridge #5A

— I like the idea of ped/bike bridge separate from road/car bridge.

I have commuted in Denver w/excellent bike lanes, but felt threatened by autos. I feel it makes sense to put the bike lanes away/separate from the auto roads.

— Do it right the first time and widen Orange Street for traffic/bikes/pedestrians!

— I would prefer to see a bike/trail bridge added to the existing bridge. A new structure would be more costly and would add another obstruction possibility in the river.

— I really like the Kansas City Bridge idea. It seems that it would be a draw to the downtown area, as well as addressing the traffic concerns of both motorized and non-motorized travel.

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5/20/94

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*ORANGE STREET BRIDGE and*
*RIVERFRONT ACCESS PROJECT*

## STAKEHOLDER CONCEPT TEAM MEETING No. 4
May 31, 1994

### AGENDA

7:00 - 7:10 Welcome and Agenda Review

7:10 - 8:00 Finalize Alternative Selection Matrix Weighting Factors

8:00 - 8:30 Project Alternatives Presentation and Refinement

Proposed Alternatives for analysis in Environmental Assessment

**Road Bridge:**

a. Refurbish and widen existing bridge - same grade - complimentary additional structure (steel girder) - remove railroad underpass - lower grade slightly - realign Cregg Lane. (New trail underpass)

b. Remove and Replace existing bridge with new 3 span structure - lower grade - remove railroad underpass - relocate Cregg Lane (New trail underpass)

c. Remove and Replace existing bridge with new 2 span structure - lower grade - remove railroad underpass - relocate Cregg Lane (New trail underpass)

d. No - build

**Pedestrian/Bicycle Bridge:**

a. Attached bridge underneath (alongside) road bridge.

b. Separate bridge upstream of road bridge - below island.

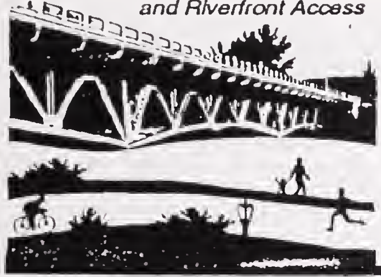
c. Separate bridge downstream of road bridge - end of trail on north side.

d. No - build. (use road bridge)

8:30 - 9.00 Finalize Project Issues and Concerns
Finalize Project Objectives

9.00 - 9:30 General Feedback and Discussion

# ORANGE STREET BRIDGE
*and Riverfront Access*



Vol. 1, No. 3

MISSOULA

ORANGE STREET BRIDGE & RIVERFRONT ACCESS PROJECT

# NEWSLETTER

August, 1994

## NEXT PUBLIC MEETING

**September 14, 1994**
**Wednesday**
**6:30 PM - 9:00 PM**
**Roosevelt School**
503 Edith Street
(Wheel chair access is on Stephens Street side of building from the playground)
Please mark your calendar and plan to participate.

## INTRODUCTION

The Orange Street Bridge and Riverfront Access Project is into its final stages - the completion of the Environmental Assessment (EA) and determination of the preferred alternative. The purpose of this issue of the project newsletter is to provide you with:

- ☐ an update of project activities
- ☐ a question and answer section
- ☐ the date, time, and place of the next public meeting
- ☐ a reschedule of the formal public hearing.

The next Informal Public Informational Meeting will be held on September 14, 1994 at 6:30 p.m. at Roosevelt School, 503 Edith Street. The EA will be available for review and comment at this meeting. We encourage your participation and hope to see you there.

## PROJECT HIGHLIGHTS

The first of two Informal Public Informational Meetings was held on May 11, 1994. Alternatives for the vehicle bridge and for bicycle/pedestrian facilities were presented along with the Environmental Assessment (EA) alternative rating factors and public comment to date. Comments on these were received from the public.

The last of four Stakeholder Concept Team meetings was held on May 31, 1994. The weightings of the EA alternative selection matrix factors along with other items were finalized for option evaluation.

The alternative selection matrix is now being completed, the EA is being written and both will be presented at the September 14, 1994 public meeting.

## ISSUES AND CONCERNS

Based on the weightings assigned to the selection criteria, specific project factors such as safety and traffic patterns are issues of great importance in addition to the environmental factors such as air quality, wetlands, and wildlife. Items such as energy, relocation concerns, roadside development, and agriculture were weighted lower, since these issues are impacted only slightly, if at all, by possible project alternatives.

## SUMMARY OF ALTERNATIVES

There are two sets of finalist alternatives: one for the road bridge; the other for bicycle/pedestrian facilities. The finalist road bridge alternatives for analysis and evaluation in the Environmental Assessment (EA) are:

**Road Bridge:**

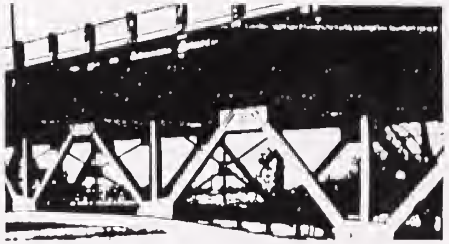
a. Refurbish and widen existing bridge - same grade - complementary additional structure (steel girder) - remove railroad underpass - lower grade slightly - re-align Cregg Lane. Bike lanes and sidewalks.

b. Remove and replace existing bridge with new 3 span structure - lower grade - remove railroad underpass - relocate Cregg Lane. Bike lanes and sidewalks.

c. Remove and replace existing bridge with new 2 span structure - lower grade - remove railroad underpass - relocate Cregg Lane. Bike lanes and sidewalks.

d. No-build (do nothing; leave as is).

All of the improvement alternatives for the road bridge include four vehicle lanes, with bike lanes on each side; ADA accessible sidewalk separated from the bike/vehicle lanes by a physical safety barrier; and a left turn lane from Orange Street northbound onto Cregg Lane with a traffic-actuated traffic signal light. The inclusion of a new trail underpass will be evaluated in each of the alternatives. All will be aesthetically designed with attractive amenities, railings and lighting.



The finalist bicycle/pedestrian bridge alternatives for analysis and evaluation in the EA are:

**Trail Bicycle/Pedestrian Bridge**

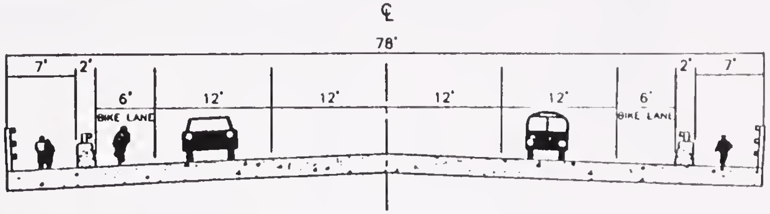
a. Attached bridge below and alongside road bridge.

b. Separate bridge upstream of road bridge - below island.

c. Separate bridge downstream of road bridge - end of trail on north side.

d. No-build (use road bridge bicycle/pedestrian facilities).

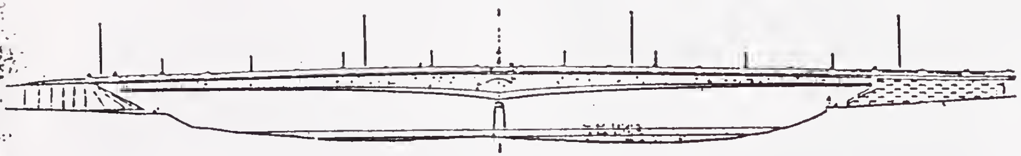
The EA will highlight the preferred alternative for the road bridge and also the one for the bicycle/pedestrian bridge. Public comment on the preferred alternative and on the EA document is encouraged at the September 14, 1994 public meeting or afterward directly to the City of Missoula Public Works Department or to the engineers of Druyvestein Johnson & Anderson.



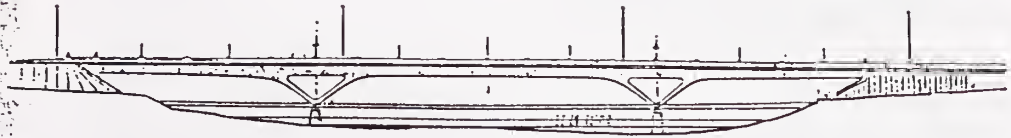
PROPOSED ROAD BRIDGE TYPICAL

## THE FOLLOWING ARE SOME EXAMPLES OF ROAD BRIDGE TYPES:

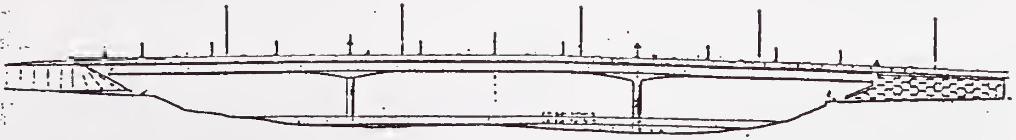
### ROAD BRIDGES



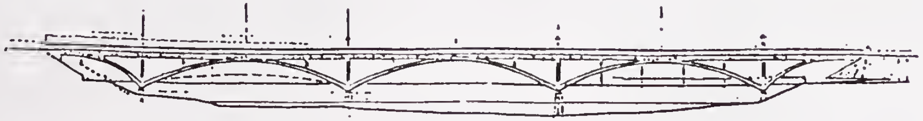
2-SPAN STEEL HAUNCHED GIRDER 1
$4,880,000



2-SPAN STEEL RIGID FRAME 3
$4,890,000



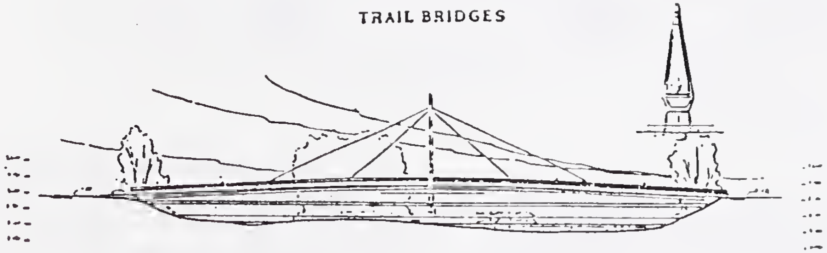
2-SPAN CONCRETE BULB-TEE 5
$4,660,000



STEEL DECK ARCH 10
$8,020,000

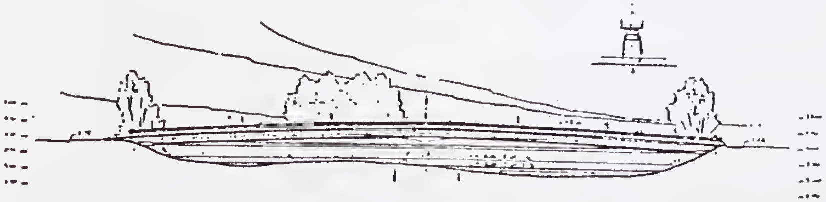
## THE FOLLOWING ARE SOME EXAMPLES OF SEPARATE TRAIL BICYCLE/PEDESTRIAN BRIDGE TYPES:

### TRAIL BRIDGES



1

STEEL CABLE STAYED, Crossing @ "B"
$510,000



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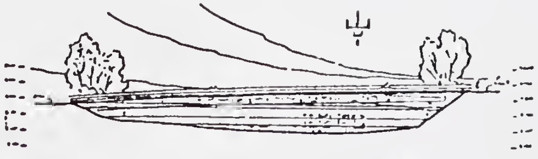
CONCRETE BULB TEE, Crossing @ "B"
$440,000



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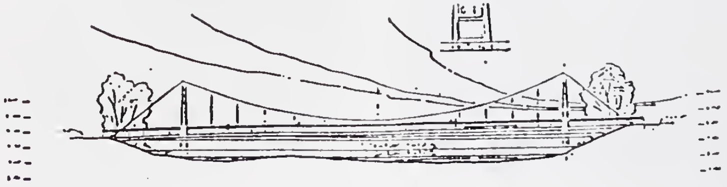
STEEL BOX GIRDER, Crossing @ "D"
$300,000



9

SUSPENSION BRIDGE, Crossing @ "C"
$630,000

## Questions and Answers

Q. *What is an environmental assessment?*
A. An environmental assessment (EA) is a document required by federal law for projects, such as this one, with federal funding. The EA examines each of the finalist alternatives developed through public involvement. The EA analyzes each option to assess how that alternative affects a variety of environmental factors (e.g., air quality, noise, wildlife, and the local economy) and project specific issues (e.g., pedestrian and bicycle access to the riverfront trails and parks, and the Cregg Lane intersection). The alternatives are ranked according to their beneficial/negative effects to these factors and issues. The overall best alternative is presented as the preferred alternative in the EA (i.e., the one with the most beneficial/least negative effects).

Q. *How are the alternatives rated or ranked?*
A. While there is no specific legal methodology or procedure for ranking, this project uses a three-phased approach to provide as much objectivity and public involvement as possible in the process. An alternative selection matrix with weightings, rankings and substantial public participation is used to achieve this result. The matrix and the process will be detailed in the EA.

Q. *During the project, the City Council passed a resolution urging that the island complex upstream (i.e., between the Orange Street and Higgins Avenue bridges) be designated a wildlife refuge and sanctuary and that no bridge should cross this island complex. What affect did this have on the process?*
A. The City Council voted strongly in favor of this resolution. They are the elected representatives of the public. The effect on the process was that this action became additional public input for the project and it indicated that a separate bicycle/pedestrian bridge across the island was not a viable alternative for consideration since it would not be approved by the City Council. There is sufficient public interest in a separate bike/ped bridge to the east of the Orange Street bridge that the Trail Bridge alternative "Trail b" (separate bike/ped bridge upstream of road bridge - below island) is one of the finalists to go through environmental assessment.

Q. *Are there any impacts to designating the upstream island complex a wildlife refuge and sanctuary?*
A. There are costs and impacts associated with this action. A letter from the Montana Department of State Lands (DSL) specifically addressing this issue includes the following statements:

☐ The island complex ". . . is owned by the State of Montana."

☐ Islands which are owned by the state are ". . . to be held in trust for the benefit of the public schools of the state (77-1-102). DSL is directed to manage these lands in the same manner as other school trust lands (77-1-203). In general, this means *the lands are to be managed for the long term generation of revenue.* The concept of a wildlife refuge or sanctuary is not inconsistent with the management direction for school trust lands *provided such use fairly compensates the trust.*" (Emphasis added)

☐ "Because of the variable nature of this island, I do not feel it would be appropriate for our office to grant an easement or a wildlife refuge or sanctuary. A license for this use would be more appropriate as it would allow both DSL and the licensee flexibility to change in response to conditions on the ground."

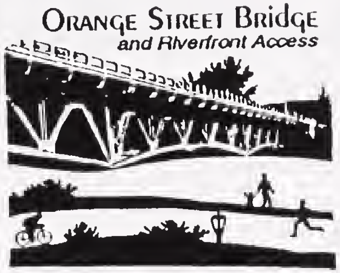
☐ "Should your constituents decide to pursue licensing of this tract, I ask that they give some consideration to how the proposal might affect recreational use of this state land. As you are aware, recreational access to legally accessible state lands has been a highly controversial issue. Restricting recreation use of this island is an issue that cannot be ignored."

## Questions and Answers (cont.)

Q. *What is the status of the Cultural/Historical and Wetlands/Biological analyses of the project area?*
A. Project sub-consultant specialists in these areas have completed their field work on the project and their findings will be included in the EA. At this point, there does not appear to be any serious or prohibitive problems to the project.

Q. *The second Informal Public Informational Meeting was to have been held on August 10, 1994, but was not. What happened?*
A. In any complex multi-disciplinary project such as this, scheduling estimates must be used to schedule events months or more into the future. While great care and attention is focused on keeping on schedule, circumstances outside of project control may delay the timing originally established. An unforeseen, non-controllable delay in receiving certain traffic information, which was necessary to assess potential air quality improvements, caused the August 10 meeting to be pushed back to September 14, 1994. This will also cause the Formal Public Hearing before the City Council to be rescheduled tentatively to November 7, 1994. One of the purposes of this project newsletter is to keep you informed of project progress and any necessary rescheduling.

Q. *Where do we go from here?*
A. Comments on the EA and the preferred alternative will be reviewed and incorporated in the finalized EA. The EA and the preferred alternative will be presented to the City Council at a formal public hearing for approval. Following approval by the City Council, and then by the Montana Department of Transportation, it is anticipated that a second contract will be let by the City for detailed construction drawings and construction management for the improvements. At this time, it is estimated that the contract for construction will be let in the Fall of 1995 with construction to commence shortly thereafter.



Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591

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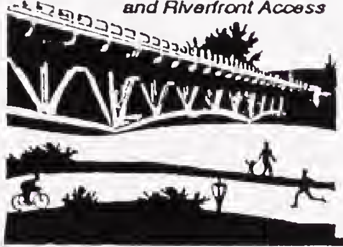
ORANGE STREET BRIDGE
*and Riverfront Access*



MISSOULA

ORANGE STREET BRIDGE & RIVERFRONT ACCESS PROJECT

# NEWSLETTER

Vol. 1, No. 4 September, 1994

**NEXT PUBLIC MEETING**
September 28, 1994
Wednesday
6:30 PM - 9:00 PM
Roosevelt School
503 Edith Street
(Wheel chair access is on Stephens Street side of building from the playground)
Please mark your calendar and plan to participate.

## Public Meeting

## RESCHEDULED

The purpose of this issue of the Orange Street Bridge and Riverfront Access Project Newsletter is to inform you of the postponement of the informal Public Informational Meeting previously scheduled to be held on September 14. This meeting has been postponed and rescheduled for Wednesday, September 28.

The reason for the postponement is a delay in receiving certain traffic information necessary to assess potential air quality improvements. The rescheduling is necessary to provide the best possible data on which to base the Environmental Assessment and selection of the preferred alternative.

If you have any questions, please call Joseph L. Aldegarie, City of Missoula, Director of Public Works at 523-4621 or Vaughn Anderson or Tom Picciano at the engineering firm of Druyvestein Johnson & Anderson at 721-4320.

We hope to see you at the September 28 public meeting.

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# RESCHEDULED !

NEXT PUBLIC MEETING

* * SEPTEMBER 28, 1994 * *

WEDNESDAY

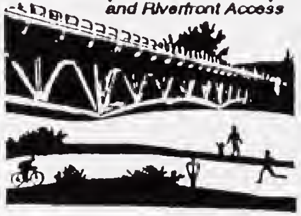
6:30 P.M. - 9:00 P.M.

ROOSEVELT SCHOOL

503 EDITH STREET

(The meeting was originally scheduled for September 14 but has been postponed to September 28)

ORANGE STREET BRIDGE
*and Riverfront Access*



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Missoula, MT 59801-8591

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## CORRECTION

A column in Sunday's Missoulian incorrectly reported that a meeting on the plans and studies for the Orange Street Bridge would be held on Sept. 14. The meeting has been rescheduled for Sept. 28, 6:30-9 p.m. at Roosevelt School, 503 Edith St.

TUESDAY
SEPT 13, 1994
MISSOULIAN
PAGE A-2

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## IN OTHER BUSINESS ...

Republican" and liberal council member Craig Sweet joked that Horton is a "Rastafarian," a Jamaican religious sect.

In other business, the council:

■ Awarded the contract for the construction of the new Missoula Fire Department headquarters on East Pine Street. Martel Construction of Bozeman made the lowest bid at $1.57 million. The city had estimated the cost at $1.52 million.

Additional work — engineering and design, furnishings, telephone line construction and a contingency fund — will push the total cost to $1.74 million. Another $390,000 will be spent on building a training tower, more engineering and design, equipment, public art and apparatus refurbishing.

■ Learned that the Orange Street Bridge and Riverfront Access Project, which had planned an informal public meeting for Wednesday to present the project's options, will delay that meeting until Sept. 28, from 6:30 to 9 p.m. at Roosevelt School.

■ Took no action on activist

TUESDAY
SEPT 13, 1994
MISSOULIAN
PAGE B-2

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MISSOULA DEPARTMENT OF PUBLIC WORKS

City Project No. 93-073

Project No STPU 8107(10)

ORANGE STREET BRIDGE
and Riverfront Access

### INFORMAL PUBLIC INFORMATIONAL MEETING

OPEN FORUM
Wednesday, Sept. 28, 1994
6:30-9:00 p.m.
(Short Presentation at 7:30 p.m.)

### ROOSEVELT SCHOOL GYMNASIUM

503 Edith St., Missoula, MT
(Wheelchair access is on Stephens Street-side of the building)

The Orange Street Bridge and Riverfront Access Project is into its final stages – the Environmental Assessment (EA) and the preferred alternative for construction.

At this meeting, the preferred alternative for both the road bridge and for bicycle/pedestrian facilities will be presented along with the EA document.

The EA details the alternative selection process and the ranking of each of the finalist alternatives.

We encourage public comment on the EA and the preferred alternative at the Sept. 28, 1994 meeting.

Comments will be reviewed and incorporated in the finalized EA to be presented to the City Council at a formal public hearing for approval.

Representatives of the engineering firm of Druyvestein Johnson & Anderson and the City of Missoula will be on hand to receive your comments and suggestions. We hope to see you there!

FOR MORE INFORMATION
or to be placed on the mailing list, contact:

Vaughn Anderson or Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT
721-4320

Joseph L. Aldegaria
Director of Public Works
435 Ryman
Missoula, MT
523-4620

SUNDAY
SEPT 25, 1994
MISSOULIAN
PAGE B-2

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Missoulian, Sunday, September 25, 1994 – D-7

2056 Sept 18, 25 1994

NOTICE

Orange Street Bridge and Riverfront Access Project informal public informational meeting—Wednesday, September 28, 1994—6:30-9:00 p.m. Open forum (short presentation at 7:30 p.m.)—Roosevelt School Gymnasium, 503 Edith Street, Missoula, Montana. Preferred alternative and environmental assessment presented. Public comment encouraged.

2120 Sept 25 1994

NOTICE

NOTICE IS HEREBY GIVEN that the City Council of Missoula, Montana, will meet September 28,

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B-2 – Missoulian, Monday, September 26, 1994

MONTANA

## ROUNDUP

### Orange Street alternatives get airing

■ The city of Missoula's Public Works Department and consulting engineers Druyvestein Johnson & Anderson will present the environmental assessment and preferred alternative for the road bridge and bicycle/pedestrian facilities for the Orange Street Bridge and riverfront access project from 6:30 to 9 p.m. Wednesday, at Roosevelt School gymnasium, 503 Edith Street.

For more information, contact Vaughn Anderson or Tom Picciano at 721-4320 or Joe Aldegarie at 523-4620.

*Missoulian*

# ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT

## INFORMAL PUBLIC INFORMATIONAL MEETING NO. 2

Wednesday, September 28, 1994

The following comments were submitted on comment sheets:

- Draft Sect. 3 - Page 30 portion of Table 2 - can't figure out how totals for Alt. 1 were derived. In the poster sheets that summarized the Alts. for the bike/ped bridge, the "no-build" alternative was not explained only when Tom showed the cross-section drawing on P2 of the newsletter (Aug. '94) and explained that this was a feature of all the new traffic bridge alts was it clear that this was in fact a 4th — and very important alt. feature. Ditto for the oblique photo which had yellow tape highlighting the upstream, downstream and "underneath" bike/ped locations, but not the one that would be built, and lacking funding for the downstream bridge would be the only bike/ped lanes. This could be confusing and misleading to the person who doesn't read all the material.

  Along this line, an important feature - with or without the downstream bridge - would be the 4 ramp structures located at each "corner" of the bridge to provide a safe access between trail and Orange Street, at both ends of bridge and w/o having to cross Orange St. This too is a very important part of the access plan and wasn't highlighted in the posters or photo oblique. As a matter of fact, these ramps aren't even discussed in the "proposed alternatives" draft. To the contrary, P. 16 PBNB no build alt. says "users would be confined to using road bridge for ped and bicycle access across river (says nothing about access to trail activity – how can this be when the ramps will provide virtually the same access as the proposed downstream bridge, which is only a couple hundred feet away. In light of this, I think the public should be informed very clearly on the ramp access and given the chance to ponder whether or not a $400 M+ separate bridge is really a priority when Missoula faces such other $ crunching problems like sewering, N. Reserve, & Malfunction Junction.

  One other point: in Table 1, I don't understand how earthwork for refurbishing & widening the old bridge can cost $50M more than removing & replacing. In fact, it accounts for most of the cost differences between R1 & R2 & R3 (I think the new bridge is the way to go, however)

  Lastly: In the cross section of the 4-car-2-bike-2 ped lane bridge, a barrier is shown between bike and ped lanes. While this is intended to provide "sweepage" for bike lane along w/car lane, on both Higgins and Madison bridges, the sidewalk curbs seem to serve as a collector of debris in the biking portion. Could a barrier between bike/ped be made that would allow better cleaning than we see on Madison/Higgins?

- The railroad Bridge (Milwaukee) should definitely be eliminated and filled. The ped, bike path should go along the river and not through the area the RR bridge occupies. The two span vehicle bridge looks the cleanest and appears to impact the river the least of the alternatives. If you must build a separate walk bridge - bike bridge it should be west of the bridge away from the island. This island has numerous species of wildlife on it and it should not disturbed.

- Would prefer a separate ped/bicycle bridge east of Orange St. Bridge.

- Use existing California Street Bridge as site of PB bridge because:

  1) It will encourage extension of riverfront trail system - which needs such a goal.

  2) It will confirm other - transportative - reasons for bridge. Bridge users are not just recreationists.

  3) It will complement existing infrastructure: California St., park on right bank, access between to isolated neighborhoods (new Missoula residents W. of old mill, N of 3rd , E of Russell) (old west side), will link to Scott St. stop light.

- It appears that placement of a trail-level bike-ped bridge, situated west of Orange, is still considered a preferred alternative.

  1. I oppose situating a bridge below Orange St. bridge if it can be seen from anywhere along the span of the Higgins St. Bridge.

  2. I would prefer situating a bridge far enough downstream that it cannot be seen from anywhere along the span of the Orange St. Bridge.

  Summary: I am quite concerned about viewshed. Luckily (?) no more than one other bridge is in sight when looking upstream or downstream from any of our bridges now. Let's maintain that luck!

- I am glad to see that a separate bridge between Orange & Higgins is not being recommended. If indeed a separate bridge west of Orange is accepted as the best alternative, it should be built to have as little visual and environmental impact on the river as possible.

- The preferred bridge alternative looks fine. R-3. I'm NOT in favor of the preferred trail bridge. Option PB2 - out of the question due to traffic emptying/gathering at senior residence. Option PB1 - my preference for cost-convenience - aesthetics. Option PB3 - we do not need an additional structure - that's in a separate location. As far as style (construction) nothing aerial.

- A 4 lane bridge only encourages more traffic - it's not needed. A separate bike/ped bridge encourages more people to walk or bike. Even with a bike lane on the main bridge, many cyclists are still intimidated to ride across a bridge with motorized traffic. It also funnels all bicycle traffic onto Orange Street which again is intimidating to many cyclists or potential cyclists.

- Orange Street Bridge should remain a 2 lane bridge. If you widen it to accomodate traffic, it will do just that. What the real issue should be is to accomodate pedestrians and bicyclists. We do not need more pollution, more noise, more traffic. I would like pedestrians and bicyclists to become a priority. Their needs should be met first. A separate pedestrian bicycle bridge should be built with access to both sides of the Riverfront Park. Repair the existing Orange Street Bridge and maybe if more cars were inconvenienced, traffic flow would decrease!

- I have real question about the "weighting" etc. - the advantages of the attached bike-ped bridge seem much more significant than the other. I still am not convinced a separate bridge is worth the investment and plan to be talking to the Council about it. I would support doing something for access of disabled community over river - but could be attached on bridge - or could be a California bridge - as was recommended by Open Edges study.

- To keep the trails connected away from the city's center is good

- Trail bridge - bad idea - already enough bridges across the Clark Fork. So... alternative bridge #3 (preferred) with spiral ramps on both sides to connect to riverfront trails. Make the bridge preposterously wide, if necessary, to accomodate bikes, peds, wheelchairs.

- Be sure that the Orange Street vehicle bridge is easily accessible to bikes coming from the trails to cross the river in either direction. I'm concerned about too many bridges across the river, but not opposed to the 2nd bike/ped bridge at "C".

- Build ped/bike bridge downstream if cost isn't much more than alongside auto bridge.

- I prefer alternative R3 remove & replace with a 2 span bridge. The fewer pillars or foundations in the river the better. If it were practical I would prefer no supports in the river at all. It appears that I agree with the preferred alternative on the draft for the roadway structure.

I wish to convey the following with regards to the pedestrian/bicycle bridge. First - the City Council (especially those who voted in favor of resolution #5580) had no business interfering with the environmental assessment. In fact I wonder how much the City is interested in paying to the Department of State Lands a use fee for turning the island into a sanctuary.

Second - As is the case in most hastily done endeavors, the City Council in the premature action of passing Resolution #5580 made waste. As indicated in a letter from Fish, Wildlife & Parks, government these days is under fire from limiting public access to public property. The island complex is public property and the City Council resolution had the effect of limiting public access to the island.

- Third - The impression I receive from the critics of a bicycle pedestrian separate from the roadway bridge and east of the existing bridge is that they are "whining". The reasons against a bridge east of the roadway bridge have been vague and not specific, i.e. "the public does not want it". In my opinion the critics are saying "not in my back yard, stupid" - bottom line.

- Fourth - some critics of a separate bicycle pedestrian bridge do not want such a bridge at all. As I state in my third comment - "this position" infringes on the public access to the trails system. Again this concept points to "not in my back yard".

- Fifth - as stated in the draft environmental assessment limiting access to public trails is in conflict with the Americans with Disabilities Act.

- Sixth - the City Council's resolution #5580 jeopardized the environmental assessment which the taxpayers are footing the cost which amounts to ≈ $167,000. I resent the attempt to undermine the environmental assessment process.

I would prefer to have a separate bicycle pedestrian footbridge located east of the existing roadway bridge. Also I would prefer to have a pier for such a bridge on the island complex, preferably the west end. My reasons are to mitigate hydrology effects on the river and to provide access to the island for the public. As noted in the draft environmental assessment report at page 64 "during the field reconnaissance, very few wildlife species (or their sign) were seen on or adjacent to the project area". At page 65 "there is very limited habitat in the vicinity of the project for upland bird species . . ." "but there is no evidence of any of these species near the proposed project" (reference to raptors). At page 67 "no wildlife with a rare and sensitive status are known or observed in the project area".

Since my preferences are not possible due to the events and results of the E A. the I would prefer to see PB2 built due to the proximity to Clark Fork Manor - access and because of visual access to the island. Most important I feel that it (PB2) would have the highest use - especially by those seeking access to the trail system., i.e. runners, walkers (pedestrians) and bicyclists.

Since I was a stakeholder I thank you for the chance to participate in the process, which was a fair deal. The only exception to the fairness of this environmental assessment was the interference by the City Council.

- I would like to have a combined bicycle pedestrian bridge for the Orange Street Bridge. I do not want a separate pedestrian bridge unless it is at the California Street Bridge location.

- I support the preferred alternative (R3) for the Orange St. Road Bridge. It's important to me that it will have the least environmental impact, especially on the river system; and that it's cost is the lowest. I appreciate efforts to keep costs under control especially when federal money is involved since there may be a tendency to overbuild.

I question why access to the trail system cannot be provided as part of the Orange St. Bridge reconstruction as the least cost, least environmental impact approach to access to the trails in that area. If a separate bike/ped bridge is really worth the cost of its construction and maintenance I support its placement west of the Orange St. Bridge where the river narrows and where it can provide access for the north and westside neighborhood kids to McCormick Park as well as access for the disable community and senior citizens.

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**The following comments were written directly on the alternative advantages/disadvantages sheets taped to the walls :**

TRAIL ALTERNATIVE PB1 (ATTACHED UNDERNEATH ALONGSIDE):

- Least environmental impacts - least river impacts - least wildlife impacts -- these seem like such major advantages that I can't believe this received appropriate "weighting"

- Cost -- this is a biggie in Missoula!

- Another advantage - the public has supported the "attached" alternative above all others since the beginning of the process (7 years?). It is likely to be the favorite again, especially if it's cheaper!

- Safety - ADA considerations -- a bridge alongside can address both of these.

TRAIL ALTERNATIVE PB2 (SEPARATE UPSTREAM - BELOW ISLAND):

- Wildlife viewing -- wildlife need space to feel safe and would probably not stay if human impact is too great - people can watch from the banks and its win-win for humans and wildlife

- Longest bicycle/pedestrian bridge = most expensive

- Safety would be a problem if bikes are directed along path near Clark Fork Manor

- Safety also a problem if connection to bridge is via Caras Park parking lot

TRAIL ALTERNATIVE PB3 (SEPARATE DOWNSTREAM - END OF TRAIL ON NORTH SIDE):

- Promotes non-motorized transportation the most -- but a well-planned provision on the deck of the car bridge (share the road for bikes) will also have this advantage.

- Cheaper than PB2 bridge because of shorter span

- Improved access to McCormick Park for north and west-side neighborhoods.

- Safety a problem if bikes are directed along path near Clark Fork Manor.

- Safety also a problem for cyclists going thru clinic parking lot to get to city streets on north bank.

- Why limit location? Why not use California St. site? Re-emphasize transportation (over recreation).

## ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT

### PROJECT TEAM MEMBERS

| | |
|---|---|
| ■ Druyvestein Johnson & Anderson<br>Vaughn Anderson<br>Tom Picciano<br>3201 Russell Street<br>Missoula, MT 59801-8591 | 721-4320<br>(FAX) 549-6371 |
| ■ HNTB Corporation<br>Jerry Dorn<br>600 108th Ave. N.E., Suite 405<br>Bellevue, WA 98004 | 206/455-3555<br>(FAX) 206/453-9179 |
| ■ Campbell Reynolds Associates<br>Sharon Campbell<br>Peter Reynolds<br>P.O. Box 859<br>Hamilton, MT 59840 | 363-0120<br>(FAX) 961-5181 |
| ■ Jill Thornton<br>Landscape Architect<br>P.O. Box 9431<br>Missoula, MT 59807 | 677-3636<br>(FAX) 677-3636 |
| ■ GCM Services, Inc.<br>Lynn Fredlund<br>P.O. Box 3047<br>Butte, MT 59702 | 723-4387<br>(FAX) 723-4388 |
| ■ Natural Resource Services<br>George Chaffee<br>P.O. Box 1559<br>Eureka, MT 59917 | 889-3725 |
| ■ HNTB Corporation (CO Abatement)<br>John Jaeckel<br>11270 West Park Place, Suite 500<br>Milwaukee, WI 53224 | 414/359-2300<br>(FAX) 414/359-2310 |

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## ORANGE STREET BRIDGE & RIVERFRONT ACCESS PROJECT

### TECHNICAL ADVISORY COMMITTEE

| | | |
|---|---|---|
| JOE ALDEGARIE | DIRECTOR OF PUBLIC WORKS | 523-4621 |
| BRUCE BENDER | CITY ENGINEER | 523-4623 |
| GEOFF BADENOCH | MISSOULA REDEVELOPMENT AGENCY DIRECTOR | 523-4607 |
| MARTIN VANMIL | MONTANA DEPARTMENT OF TRANSPORTATION | 549-6491 |
| KAREN JAWORSKY | BICYCLE/PEDESTRIAN COORDINATOR | 523-4626 |
| DOUG HARRISON | CITY COUNCIL PRESIDENT | 721-5570 |

MISSOULA
DEPARTMENT OF PUBLIC WORKS
435 RYMAN • MISSOULA, MT 59802-4297 • (406) 523-4620

JOSEPH L. ALDEGARIE
Director

Engineering
Traffic
Streets
Sewers
Vehicle Maintenance

February 17, 1994

REF: Orange Street Bridge & Riverfront Access Project
State Project No. STPU 8107(10)
City Project No. 93-073
Stakeholder Concept Team Participation

Thank you for agreeing to participate as a Stakeholder Team Member. The project will be interesting and your input, ideas and viewpoint will be important to its success.

To review some of the format, the Stakeholder Teams (there will be three of them, with nine participants each) will meet three times, approximately a week after each of the two public scoping meetings and the first informal public information meeting. We will meet on a Tuesday evening, probably at 7:00 p.m., for 2 to 3 hours each time. Our Stakeholder Team meetings will be held at the Clark Fork Riverside Retirement Center, 301 East Front.

Each Stakeholder Team is made up of a broad spectrum of *affected publics*,—those whose group or organization has a real *stake* in what happens with the Orange Street Bridge and Riverfront Access. The teams were designed this way to provide for optimal input from many different viewpoints.

In order to make these Stakeholder Teams work to provide the best possible alternatives for Missoula, we'd like the following to be considered your *mission* for team participation:

1. To generate and refine ideas,
2. To identify and crystallize issues and concerns
3. To assist in developing and reviewing alternative concepts
4. To assist in developing alternative selection criteria
5. To assist in assigning weights to these criteria to make the selection process as objective as possible for the Advisory Committee and the City Council.

In order to accomplish this mission, we'd like the following to be considered your informal *ground rules* for Stakeholder Team participation and for you to make a commitment to abide by these *ground rules:*

1. Participate fully; but don't try to dominate team meetings or controversial issues. All issues need to be aired.

AN EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER M/F/V/H

2. Attend all three meetings - your team needs your consistency and continuity. We do not want a substitute if you have to miss a meeting.
3. Strive to reach consensus on issues and concepts, or at least be willing to compromise - these Stakeholder Concept Team working meetings are not the place for single-minded stonewalling or heel digging - we have a concerted mission to accomplish.
4. Encourage full participation by your more reticent team members - they are on the team to represent varied, but nonetheless valid, viewpoints which need to be considered.

If we adhere to these guidelines, the results of our efforts will be rewarding personally and for our City.

As Stakeholder Team Members, you will also receive notification of the other events and meetings of the project. You are heartily encouraged to provide your ideas and comments to these functions as well.

Finally, we again appreciate your enthusiasm to participate in the spirit of community. We look forward to working with you.

Please mark your calendars for the kickoff Orange Street Bridge and Riverfront Access Project Stakeholder Concept Team Meeting:

— Tuesday,
— March 1, 1994,
— 7:00 p.m.,
— Clark Fork Riverside Retirement Center, 301 West Front,
— Wheelchair accessible,
— Meet in the dining room.

If you have any questions, please call Vaughn Anderson or Tom Picciano at 721-4320.

Joe Aldegarie
Joseph L. Aldegarie, P.E.
Director of Public Works
City of Missoula

Vaughn Anderson
Vaughn Anderson, P.E.
Project Manager
Druyvestein Johnson & Anderson

mal/2680

RECEIVED
FEB 18 1994
MISSOULA MONTANA
CITY ENGINEERING

304 S 2nd St., West
Missoula, MT 59801
February 17, 1994

Joe Aldegarie, Director
Department of Public Works, City of Missoula
435 Ryman
Missoula, MT 59802

Dear Joe:

I thank you for the letter of February 8, 1994 concerning the Orange Street Bridge and Riverfront Access Project. I would like to respond to your interests in hearing from the recipients of the letter, and in particular, hearing about anyone we think should be contacted who isn't on the list that was enclosed. As to substantive comments, that will come later; right now, a response concerning people to be contacted.

I am puzzled at the absence of the Open Space Committee on your listing of "local interests", as well as the absence of conservation groups which are currently working on projects along the Clark Fork River, including one involving the very area included in the project. Indeed, the City Park Board is missing as well, to say nothing of city members of the Planning Board. I would have thought that a community process would include members of all such groups in any first cut.

I am asking you to list, and contact, the following groups and individuals, as "Local Interests" or "Persons of Concern".

1. Citizens Open Space Advisory Committee
   c/o Richard Gotshalk
   304 S. 2nd St., West
   Missoula, MT 59801
   [This can be combined with the notice to the Riverfront Neighborhood Association, for whom I am also the contact person.]

2. William Ballard
   5120 Larch
   Missoula, MT 59802

3. Ron Erickson
   3250 Pattee Canyon
   Missoula, MT 59803

4. Mark Fryberger
   255 N. Easy St
   Missoula, MT 59802

5. Perri Knize
   2231 Foothills
   Missoula, MT 59803

6. John Langstaff
   10800 Grank Creek Rd
   Missoula, MT 59802

7. Andy Sponseller
   1025 Rollins
   Missoula, MT 59801

8. Liz Stevenson
   8300 O'Brien Creek
   Missoula, MT 59801

9. Mike Kennedy
   120 River Pines Rd
   Missoula, MT 59801

10. Thom Woodruff
    1315 River Road
    Missoula, MT 59801

11. Save Open Space Inc.
    PO Box 7755
    Missoula, MT 59807

12. Chris Buzan
    127 W. Spruce
    Missoula, MT 59802

13. Jon Bonnicksen
    506 Eddy Ave
    Missoula, MT 59801

14. John Pierce
    737 Locust
    Missoula, MT 59802

15. William Burnett
    Conservation District (Missoula Co)
    5115 S. US Hwy 93
    Missoula, MT 59801

16. Judy Smith
    WORD
    127 N. Higgins Ave
    Missoula, MT 59802

17. Hal Salwasser
    Boone & Crockett Club
    250 Station Dr
    Missoula, MT 59801

18. Alan Hoyt
    402 S. 5th East
    Missoula, MT 59801

19. C. B. Pearson
Clark Fork Coalition
102 E. Main
Missoula, MT 59802

20. Bob Henderson
Fish Wildlife and Parks
3201 Spurgin Rd
Missoula, MT 59801

21. Tracy Stone-Manning
Five Valleys Land Trust
102 E. Main
Missoula, MT 59802

22. Cate Campbell
MPA
208 E. Main (Union Hall)
Missoula, MT 59802

23. Carol Fischer
1534 Mansfield
Missoula, MT 59801

24. Adriene Corti
2717 Raymond Ave
Missoula, MT 59801

25. Donna Shaffer
800 North 4th
Missoula, MT 59802

26. Beryl Stover
216 Pattee Canyon Drive
Missoula, MT 59803

27. Robert O'Conner
PO Box 4105
Missoula, MT 59806

28. John Fletcher
PO Box 8381
800 Chestnut
Missoula, MT 59807

29. John Torma
413 North Ave, East
Missoula, MT 59801

30. David Pauli
149 Kensington
Missoula, MT 59801

31. Deborah Richie
503 Linden
Missoula, MT 59802

32. John Mangiameli
323 Hazel
Missoula, MT 59801

Sincerely,

Richard Gotshalk

Datsopoulos, MacDonald & Lind, P.C.
Attorneys at Law

Central Square Building
201 West Main Street
Missoula, Montana 59802
(406) 728-0810
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Ronald B. MacDonald
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Christopher B. Swartley
Edward A. Murphy
William K. VanCanagan
Rebecca L. Summerville
Darla J. Keck
Paul T. Ryan
Edward Janecek III
Michael G. Black

FEB 22 1994

February 18, 1994

Joseph L. Aldegarie
Department of Public Works
435 Ryman
Missoula, MT 59802-4297

Re: Orange Street Bridge and Riverfront Access Project
Sate Project No. STPU 8107(10)
City Project No. 93-073

Dear Joe:

I was pleased to receive your letter of February 8, 1994 inviting comment with regard to the improvement of the Orange Street Bridge.

As you know I have been on the Missoula Redevelopment board for a number of years and was a proponent of the construction of a bicycle/pedestrian bridge across the Clark Fork River combining access from a portion of Caras Park to the new southside park.

I am a supporter of any project which will allow easy pedestrian and bicycle access to the riverfront and will have the effect of creating a loop to allow circular enjoyment from the University footbridge through the southside park.

Ultimately I would like to see development of a similar footbridge in the California Street area.

If the Department of Transportation and the City of Missoula are in fact going to design a bicycle and pedestrian adjunct to the Orange Street Bridge, I would hope that they strive to develop such access on the river level as compared to upper vehicular level necessary due to the elevations of Front Street and the access from Third Street.

The Missoula Redevelopment Agency has spent a great deal of its time and resources in renewing the riverfront and raising the consciousness of the citizens to this tremendous resource in the center of our city. Pedestrian connection to the river on the present Higgins, Madison and Orange Street bridges does not create a personal nexus with the river and any enjoyment of the river from the upper levels competes with the presence of vehicular noise, disruption and pollution.

Personally I would prefer to see a footbridge separate from the Orange Street Bridge that would connect the central business district with the south shore park. As a financial matter, such a mechanism can be incorporated into the Orange Street Bridge without utilizing the precious resources of the Missoula Redevelopment Agency, I would become a strong supporter as long as the pedestrian levels approximate the existing trail system and the design attempts to reduce the impact of the overhead vehicular traffic.

My family and I utilize the riverfront trail frequently and have noticed a significant increase in citizen use in the last three years. Literally the health of the community in the winter months partially depends upon this trail system for recreation. Numerous people risk the utilization of the Montana Rail Link bridge at the west end of McCormick Park and have the unpleasant conflict with Broadway traffic until they can return to the trail system at the old Fox Theater site.

I believe the design of the south shore park and its trail system will alleviate most of the previous concerns that the south shore neighborhood had with regard to traffic and south street accesses.

Collaterally I would hope that the Old Milwaukee overpass will be preserved in one form or another as I would hope that we would ultimately be able to develop the Old Milwaukee right-of-way as a nexus for a crossing in the California Street area. If this cannot be accomplished then I would hope that the design would accommodate a riverside trail system which would ultimately provide access to the Milwaukee right-of-way on the west end of McCormick Park.

Lastly, as Missoula Redevelopment expended considerable monies to improve the Orange Street trail on the north side of the river, I would hope that your design will preserve its work there and will not require reinvestment.

Yours truly,

DATSOPOULOS, MacDONALD & LIND, P.C.

Ronald B. MacDonald

RBM/bln

cc: Mayor Dan Kemmis
Geoff Badenoch
Druyvestein Johnson & Anderson

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APR 1 1994
MISSOULA ... ENGINEERING

BikeMissoula • P.O. Box 7212 • Missoula, MT 59806 • 543-6523/543-4773

30 March 1994

TO: Stakeholder Concept Teams & Druyvestein, Johnson & Anderson, Inc.

FROM: BikeMissoula

RE: Comments on Orange Street Bridge project

The following comments are submitted to you for inclusion in the project proposal for redesigning the Orange Street bridge.

BikeMissoula, an ad hoc citizen group representing over 3,000 utility cyclists in Missoula, has been working with the city engineering office on a city-wide bike lane system. The proposed lanes will be painted on major arterials and collectors to provide commuting cyclists with the most direct routes through the city (see attached map of proposed system). The bike lanes project has already been endorsed by a number of city groups, including the Air Quality Advisory Council, the Sierra Club, the Bicycle/Pedestrian Advisory Board, the Air Pollution Control Board, the Public Services Committee of the City Council, the Jeannette Rankin Peace Resource Center, and the Environment and Transportation Committees of the Chamber of Commerce.

One of the proposed bike lane routes in the city-wide system would run the entire length of Stephens Avenue, continue on Orange Street, over the Orange Street bridge, and then north of the bridge to the north side of Missoula. This route is frequently used by utility cyclists, as BikeMissoula learned from a survey it conducted of 180 cyclists in February 1993.

Given the necessity of a continuous bike lane route from one side of town to the other along Orange Street, it is imperative that the bridge over the Clark Fork River also contain bike lanes. Lanes on the bridge are preferred over a separate bridge, because commuting cyclists need and have a legal right to access and moveability on city streets just like cars. A separate area for cyclists would disrupt "bike traffic" flow, making it difficult to move back onto the main thoroughfare. Safety wise, it would be best to have bicycles within site of autos all the time, rather than bikes disappearing and suddenly reappearing on the road. Legally, bikes have a right to be on the road, not to be rerouted. Additionally, maintenance is extremely important for a working year round bike lane. City policy already reads that sidewalks and shoulders must be kept clear. Making a separate roadway would compromise adequate maintenance.

Furthermore, the separate bridge, as described at the February 23rd open house, would primarily serve recreation cyclists and not the commuting cyclist, just as the riverfront trails accommodate the former and not the

latter. The federal money that will be used for this project is not intended to fund recreational facilities; a bridge connecting trails is a recreational facility.

Through extensive research on other cities' bike lanes, BikeMissoula found that bike lanes on the major streets encourage more people to use their bikes to commute, to shop, and to go to school. More bikes will reduce traffic congestion and toxic car emissions.

A survey recently released by BikeMissoula showed that 75% of Missoula's rush hour traffic consists of single occupancy vehicles. The time has come for Missoula planners to provide alternative commuting modes, rather than continuously accommodating the motor vehicle.

The city of Missoula needs to make a commitment to alternative forms of transportation by implementing non-motorized facilities on existing roads, including the Orange Street bridge. BikeMissoula urges the planners to add bike lanes on the Orange Street bridge.

If you would like more information about the bike lanes project, please contact Felice Stadler at 543-6523 or Lila Clerinshaw at 543-4773, of BikeMissoula, or contact Hank Harrington of the Bicycle-Pedestrian Advisory Board at 721-2214.

Sincerely,

Felice Stadler for BikeMissoula

Attachments

cc: Mayor Dan Kemmis
Technical Advisory Committee
Public Services Committee

MAY - 6 1994

JOHN FLETCHER
P.O. Box 8381
Missoula, MT 59807
(406) 721-4269

May 4, 1994

Orange Street Bridge and Riverfront Access Project
c/o Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591

I will be out of town on May 11, 1994, and consequently will not attend the Informal Public Informational Meeting scheduled for that evening at Roosevelt School. Please accept the following comment as written testimony.

The Orange Street Bridge and Riverfront Access Project is the third or fourth such consideration of bridge routes in the area in the past dozen years. I would like my comments entered into the record of public testimony in this project, as they have been in past projects.

I write from the perspective of a pedestrian and bicyclist in Missoula for more than 20 years. I do not own an automobile, but I do drive rental cars and other private cars with some frequency. While I realize that the effect of my comments may seem to be restricting bicycle usage; I happen to feel they also reflect responsible cycling.

Firstly, I believe that downtown Missoula's situation at a curving portion of the Clark Fork River is aesthetically quite valuable. From any particular bridge, only a single further bridge is visible, either upstream or downstream. While bridges themselves may be constructed to standards which might seem visually pleasing, I feel the visual impacts of such structures should be minimized. A visit to Spokane and a view from any of its several downtown bridges should suffice to make this point: one sees bridge beyond bridge beyond bridge. For this reason I am against construction of an additional bridge between the Higgins Avenue and Orange Street bridges, between the Madison Street and Higgins Avenue bridges, or between the Orange Street and railway crossing bridges.

Secondly, I firmly believe that bicycles are vehicles, that their use should be integrated with other vehicles, and that sidewalks and other walkways intended for pedestrian use should not be designed for bicycle use. Bicycles are generally operated at speeds several times that of a pedestrian's pace; our community has enough problems along the "bicycle/pedestrian interface" (*e.g.* on the UM campus, on bridge walkways, on

downtown sidewalks, on trails in the Pattee Canyon and Rattlesnake recreation areas) that we should look at the Riverfront as an area to begin modelling different behaviors. To this end, I suggest orienting bicyclists toward proper routes by providing these routes with appropriate width and surfaces. If bicyclists were given the opportunity, I feel sure they could restrict their travel within the city's limits to routes with a minimum 8-10' width and a macadam or asphalt surface. [The importance of a hardened or sealed surface becomes apparent when one looks at the degradation caused by bicycles along the Riverfront trail in front of the old Milwaukee depot and between the Madison and Van Buren Street bridges.]

Thirdly, I feel there are good reasons to keep "commuter" bicyclists out of the Riverfront corridor. The southside has six main entrances into the Riverfront corridor: Van Buren at Jacob's Island, the eastern terminus of S. Fourth E., the old Milwaukee depot, the bottom of Chestnut Street, the Cregg Lane and Hickory Street entrances into McCormick Park. This large number of access points helps mitigate the effects of bicycle traffic. The northside has only those leading out of Caras Park onto Pattee Street or up onto Front Street. Are we prepared for the traffic problems which would be caused by increased emergence of bicycles from the Front Street alleys?

Finally, like many people in Missoula, I have crossed the Clark Fork over the arching steel girders beneath the Orange Street bridge many times. The benefits are a greater proximity to the water and the absence of automotive traffic; the only current disadvantage is the dirty hands which result from entering an area mainly inhabited by birds. I firmly believe more pedestrians and those in wheelchairs would enjoy this shady passage away from the traffic above. While the state's highway engineers would, doubtless, have to be consulted, an open walkway could probably be built across the lower span of the Orange Street bridge without adversely affecting the overall structural integrity.

I thank you for your time and attention in this matter.

Sincerely,

John Fletcher

John Fletcher

cc: Karen Jaworsky

MAY 17 1994

**SIRIUS CONSTRUCTION INC.**
*ph. (406) 542 0004 155 BURLINGTON - MISSOULA, MT 59801 fax (406) 7211449*

May 16, 1994

Druyvestein Johnson & Anderson
3201 Russell
Missoula, Mt. 59801-8591

Attn: Vaughn Anderson

re: Orange Street Bridge

Dear Vaughn;
I am writing you representing myself as a land owner, Sirius Construction and the COAD Partnership, all of which have an interest in a property adjacent to the Orange Street Bridge. I have included a description of that property and a proposed site plan for your use. This letter is a follow-up as per your request, to our phone conversation of 5-14-94.

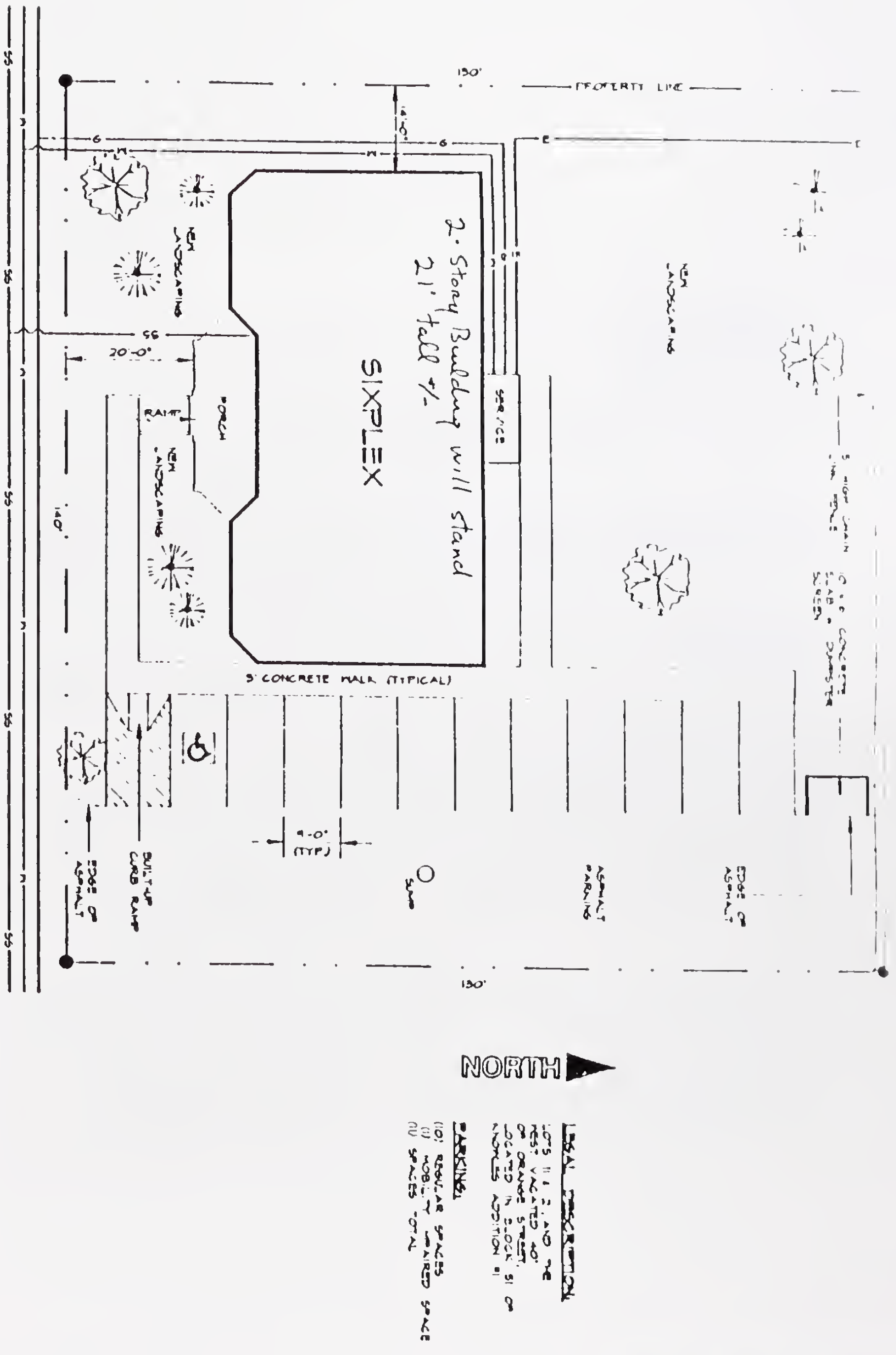
As I stated in that phone conversation, I, in concert with the above mentioned entities, plan to build one six-unit low income apartment building on that site this year. The building is one of three scattered sites comprising the COAD project which is receiving development assistance through the Low Income Housing Assistance Tax Credit Program, and the Missoula Redevelopment Agency.

My concerns in relation to the bridge, are that my tenants may be disturbed or their safety endangered by the noise, lights and traffic of automobiles. I am sure these issues can be mitigated through design and that you are currently addressing them. Please know that I remain interested in the welfare and quality of life of my future tenants and will be happy to make myself available to you to as necessary. Please let me know if I may be of any assistance to you in your endeavor. I will be following your progress with interest.

Gregory L. Nemoff
President - Sirius Construction Inc.
Managing Partner - COAD Partnership

CC: Joe Aldegarie

SITE #3
SCALE: 1" = 20'-0"



MAY 24 1994

BARBARA SPRING & ASSOCIATES, LLC 406 543.2600 PO BOX 8623 MISSOULA, MT 59807

May 21, 1994

Vaughn Anderson
Tom Picciano
Druyvestein Johnson & Anderson
3201 Russell
Missoula, MT 59801-8591

Dear Vaughn and Tom,

Thank you for the opportunity to explain the Fox Project last week.

I remain very concerned about the impact of a bridge of the downstream side of Orange Street on the Fox House. Two areas are unclear:

1. How much traffic -- pedestrians and bikers -- will utilize the bridge? It is my impression the use will be heavy.

2. How will some of this traffic be best dispersed to Front Street for the comfort of the travelers and the residents of the Fox House?

A major factor in choosing the Fox site for an assisted living project was the serenity of the riverfront trail to this urban site. If a junction to the bridge creates traffic congestion right in front of the assisted living, a great deal of serenity will be lost.

Within two years nearly 65 frail elderly and 50 more independent residents, will be strolling, being pushed in wheelchairs, and, perhaps, fishing and picnicking near the river. Please keep this population in mind when developing designs for the Orange Street Bridge and Riverfront Access.

Sincerely,
Barbara
Barbara K. Spring, Ph. D.
Manager

INNOVATIVE HOUSING COMMUNITIES

---

MAY 24 1994

May 22, 1994

To Tom Picciano

Please address these issues in the NFA process:

Closing the Orange Street bridge will cause the rerouting of traffic patterns in the City. What is the estimated increase in traffic over the Higgins streets, Russell streets and Monroe street bridges?

How long will Orange Street bridge will be closed (both lanes or single lane)?

How will the detours be set up?

Do Russell street bridge and sidewalks meet the Federal safety standards? Russell Street Bridge is unsafe for bicycles and pedestrians. What provision will be made for crossing west of Orange Street bridge?

What is the timeline for construction of California Street bridge?

Would it make sense to California Street bridge first and then Orange Street bridge?

Will Wood
1608 Howell
Missoula, MT 59802

JUN - 8 1994

#2680

HENRY R HARRINGTON
1510 Khanabad Drive Missoula, Montana 59802 (406) 721-2214

4 June 1994

Mr. Tom Picciano
Dreyvestein, Johnson & Anderson
3201 Russell Ave.
Missoula, MT 59801

Dear Mr. Picciano:

I am writing as a member of the City of Missoula Bicycle-Pedestrian Advisory Board regarding the Orange Street Bridge. The Board wishes to convey to the Orange Street Bridge Project planners its unanimous approval of the combined bridge--walkways, bicycle lanes, and vehicular traffic on the same level. To the AASHTO guidelines for designing the bridge, we would also urge you to consider the ADA guidelines as your group moves toward the final plan.

We appreciate the patient work that has led to this decision in favor of a combined bridge and the conscientious way in which you have kept the Board informed of the project's progress.

Sincerely,

Henry R. Harrington
(for the Bicycle-Pedestrian Board)

---

MISSOULA On Ice INC.

January 6, 1994

Joe Aldegarie
Department of Public Works
435 Ryman St.
Missoula, MT 59802

Dear Mr. Aldegarie,

I am writing on behalf of Missoula On Ice, Inc. As you may remember, I recently wrote requesting an update of the status of the sewer project in the McCormick area. Since we have heard nothing more, since your last letter, we'll assume progress is still at a standstill. Please continue to keep our project in mind. Our campaign will soon be in full swing and donors are anxious to know when we will be able to begin construction.

Another concern has been brought to our attention. We understand the design phase for the Orange Street bridge has begun. Hopefully, the impact of an arena, with seating for a thousand, has been taken into account when planning access to McCormick Park. All indications are, this arena will be a twelve month facility and will host activities on a regular basis, with potential for large crowds.

If our Board and Design Committee can be of assistance in any way, please let us know. We're committed to working with the city in a team effort.

Sincerely,

Tana Mullendore

Tana Mullendore
Design & Construction Chair
Missoula On Ice, Board of Directors

RECEIVED
JAN 7 1994
MISSOULA, MONTANA
CITY ENGINEERING

cc: Bob Hermes
Craig Sweet
Jim Hugent
Dan Kemmis

Post Office Box 5839 - Missoula, Montana 59806 - 406/721-7100

Campaign Headquarters - 111 North Higgins, Missoula, MT 59802

Montana Department
of
Fish, Wildlife & Parks

3201 Spurgin Road
Missoula, MT 59801
April 27, 1994

Marilyn "Mike" Cregg
520 McLeod Avenue
Missoula, MT 59801

Dear Mike:

Thanks for sharing Will Kerling's observations of wildlife on the Clark Fork islands and your thoughts on these special areas.

I received a draft City Council Resolution regarding the islands east of the Orange Street Bridge. This draft mentions Fish, Wildlife and Parks as an agency having authority to permit activities on the islands. We do not have such authority, but do comment on any specific proposals involving environmental assessments or impact statements.

We would certainly like to see the wildlife resources protected in this area. If construction of bridge supports on any of the islands becomes the selected alternative, the design should prevent access to these islands by the public. Wildlife viewing and interpretation from a "neutral" location could be incorporated in any plans for this area, and could provide an opportunity to promote awareness and respect for these habitats and their residents.

We will comment on alternatives developed as the transportation plan progresses, but do not make the decisions relative to what can or cannot take place.

Again, thank you for sharing the wildlife information.

Sincerely,

Rich

C. Richard Clough
Regional Supervisor

c: Mayor Dan Kemmis
Geoff Badenoch

RECEIVED
APR 28 1994

---

MAY - 4 1994

430 South 5th Street West
Missoula, Montana 59801
April 30, 1994

The Missoula City Council
435 Ryman Avenue
Missoula, Montana 59802

Dear Mayor Kemmis and Council Members:

We have received a copy of a resolution expressing support for the designation of the island in the Clark Fork River between the Higgins Avenue and Orange Street bridges as a wildlife sanctuary and refuge. The resolution also contains a stipulation that the island not be utilized for the installation of abutments to support a bicycle-pedestrian bridge or any bridge across the river.

After carefully considering all aspects of the resolution the Southside Neighborhood Alliance in its regular meeting voted unanimously to go on record in support of the resolution. We oppose a bridge at that location for the following reasons:

1). the bridge would impose harmful pressure on the birds and other wildlife that now inhabit the island, and
2). the vista of the river is so beautiful that we fear another bridge would detract from its scenic and spiritual value.

In summation, we feel we don't need another bridge in downtown Missoula. All our needs for getting people across the river -- bike commuters, pedestrians, handicapped persons -- can be met by redesigning the Orange Street bridge.

The Southside Neighborhood Alliance would appreciate your support of the resolution which you will be considering at the next Council Meeting.

Sincerely yours,

The Southside Neighborhood Alliance

Rick Stephens, Vice-Chairman

Margo Jerrim

Margo Jerrim, Committeewoman

Evelyn B. Johnson

Evelyn B. Johnson, Secretary

Copy to:
Dryvestein Johnson & Anderson

CC: City Council Members
MRA
Engineering

Montana Department
of
Fish, Wildlife & Parks

RECEIVED
JUN 2 [illegible]
MISSOULA, MONTANA
CITY ENGINEERING

received
6/2/94

P.O. Box 200701
Helena, MT 59620-0701
(406) 444-3186
FAX: 406-444-4952
Ref: PG571.94
May 31, 1994

Mr. Chuck Stearns
Finance Officer/City Clerk
435 Ryman Street
Missoula, MT 59802-4297

Dear Mr. Stearns:

I am responding for Rich Clough and myself to your request for action on the Missoula City Council's Resolution #5580.

Our agency does not have the authority to approve or deny permits for the installation of any bridge pillars or abutments on the island. The Corps of Engineers would be the governmental entity that would issue such permits. We would comment on wildlife-related impacts expected from any construction proposals during the environmental assessment process, but we have not been informed of any pending proposals.

The designation of a wildlife sanctuary and refuge is within the Fish, Wildlife and Parks Commission's jurisdiction. However, the island is located within the city and such designation would not provide any tangible benefits since all birds except Rock Doves, starlings and English sparrows are currently protected by law. Hunting is not allowed within the city limits which would provide protection for waterfowl using the islands.

If you feel you would still like to pursue this approach or have other questions, please contact Rich at 542-5500.

Sincerely,

Pat Graham

Patrick J. Graham
Director

c: Mayor Dan Kemmis
Rich Clough

---

RECEIVED
JUN 1 1994
MISSOULA, MONTANA
CITY ENGINEERING

TO: MAYOR
CITY COUNCIL
MARY WALSH, Chief Administrative Assistant
JOE ALDEGARIE, Public Works Director
DAN JORDAN, Public Works
JIM VANFOSSEN, Parks and Recreation Director
DOUG WATERS, Parks and Recreation Department
GEOFF BADENOCH, Director Missoula Development Agency

FROM: JIM NUGENT

RE: OWNERSHIP OF CLARK FORK RIVER ISLAND NEAR ORANGE STREET BRIDGE

DATE: JUNE 1, 1994 MEMO 94-226

Attached for your information is a copy of the letter but not the packet of information from the Montana Department of State Lands concerning State ownership of the islands in the Clark Fork River between the Higgins and Orange Street bridges.

If anyone would like a copy of the packet of ownership materials please contact this office for a copy.

Also, please note that in the letter the Montana Department of State Lands states that in general it must manage its lands "for the long term generation of revenue" and that "a wildlife refuge or sanctuary is not inconsistent with the management direction for school trustlands provided such use fairly compensates the trust". (Emphasis supplied.)

The Montana Department of State Lands then suggests that the issuance of a (revenue generating) license would be the more appropriate mechanism for establishing a wildlife refuge or sanctuary on the Clark Fork River islands in question.

Jim Nugent

JIM NUGENT
City Attorney

JN:mj
cc:open space file

received
6/1/94

DEPARTMENT OF STATE LANDS
FIELD OPERATIONS DIVISION

MARC RACICOT, GOVERNOR
STATE OF MONTANA

Telephone: (406) 542-4200
FAX: (406) 542-4248

SOUTHWESTERN LAND OFFICE
1401 27th Avenue
Missoula, MT 59801-4733

May 31, 1993

Vivian M. Brooke, State Representative
1610 Madeline Avenue
Missoula, MT 59801

Dear Representative Brooke:

This letter is in response to your request that the Department of State Lands (DSL) investigate their ownership of islands in the Clark Fork River between the Higgins and Orange Street bridges. Enclosed you will find a report compiled by DSL Hydrologist, Gary Weissmann. This report concludes that the island noted in Figure 1 is owned by the State of Montana. Currently this island is approximately 5 acres in size.

Islands which are owned by the state are "...to be held in trust for the benefit of the public schools of the state" (77-1-102). DSL is directed to manage these lands in the same manner as other school trust lands (77-1-203). In general, this means the lands are to be managed for the long term generation of revenue." The concept of a wildlife refuge or sanctuary is not inconsistent with the management direction for school trust lands provided such use fairly compensates the trust. In fact, Department of Fish, Wildlife, and Parks is one of our largest lessee's in Missoula County. Our Department currently has a license for a similar use (Natural Area) with Flathead County on a tract of State land east of Kalispell along the Flathead River.

The old photographs included in Mr. Weissmann's report illustrate the changes that have occurred within this segment of the river over the last 50+ years, and are a testament to the dynamic processes which are still active today. Because of the variable nature of this island, I do not feel it would be appropriate for our office to grant an easement for a wildlife refuge or sanctuary. A license for this use would be more appropriate as it would allow both DSL and the Licensee flexibility to change in response to conditions on the ground.

Should your constituents decide to pursue licensing of this tract, I ask that they give some consideration to how the proposal might affect recreational use of this state land. As you are aware, recreational access to legally accessible state lands has been a highly controversial issue. Restricting recreation use of this island is an issue that cannot be ignored.

"AN EQUAL OPPORTUNITY EMPLOYER"

The island is located within the administrative boundaries of our Missoula Unit. Ray Erickson , Missoula Unit Manager, is the local DSL contact person. His address is 1500 Tower Street, Missoula, MT 59801, phone 542-4201. Should you find that Ray is unavailable you may also contact Bob Storer at 542-4200.

Please let me know if you have any further questions.

Sincerely

JEFF JAHNKE
Area Manager
Southwestern Land Office

enclosure

jk
cc: Clark Fork River File
Mso Unit - Erickson
Lands Div- Hagener
Forestry Div - Fairbanks
Legal Staff - Andes
Msla City Atty - Jim Nugent
Marilyn "Mike" Cregg
Chairman Missoula Open Space Advisory Committee - Richard Gotshalk

RESOLUTION NUMBER 5738

A RESOLUTION OF THE MISSOULA CITY COUNCIL EXPRESSING SUPPORT FOR DESIGNATING THE ORANGE STREET BRIDGE AND RIVERFRONT ACCESS PROJECT TO BE ELIGIBLE FOR FUNDING FROM THE CONGESTION MITIGATION AND AIR QUALITY (CMAQ) PROGRAM.

WHEREAS, the Orange Street Bridge is a vital river crossing for the community of Missoula; and

WHEREAS, the existing Orange Street Bridge built in 1937 is deficient and in need of improvements; and

WHEREAS, the existing Orange Street Bridge is a two lane section between an existing five lane road system creating congestion; and

WHEREAS, the proposed reconstruction of Orange Street Bridge would be a vital safety improvement for bicyclists, pedestrians, and motorists; and

WHEREAS, in accordance with engineering studies the proposed reconstruction of Orange Street Bridge would reduce carbon monoxide levels and would be an air quality improvement;

NOW THEREFORE, BE IT RESOLVED that the Missoula City Council supports the designation of the Orange Street Bridge and Riverfront Access Project to be eligible for funding from the Congestion Mitigation and Air Quality (CMAQ) program.

PASSED AND ADOPTED this 26th day of June, 1995.

ATTEST:

/s/ Martha L. Baker
Martha L. Baker
City Clerk

(SEAL)

APPROVED:

/s/ Douglas R. Harrison
Douglas R. Harrison
Acting Mayor

---

MDT Montana Department
of Transportation

P.O. Box 7039
Missoula, MT 59807
406-549-6491

Marc Racicot, Governor

RECEIVED
JUN 16 1995
MISSOULA, MONTANA
CITY ENGINEERING

June 15, 1995

Mr. Bruce Bender, City Engineer
City of Missoula
435 Ryman
Missoula, MT 59802

Subject: Orange Street Bridge Project

Dear Bruce,

I would like to add my unqualified support for this badly needed project. MDT is responsible for the maintenance of this structure and we are well aware of its condition and need for rehabilitation or replacement. Unfortunately there will be no funds available for the major repair required for many years to come. That leaves us with the dilemma of trying to maintain an obsolete and deficient bridge on a limited maintenance budget.

The main reason for my support comes from the congestion relief and safety benefits the project will provide. Removing this spot bottleneck will allow traffic to move more smoothly all over Missoula. Moving traffic more freely will certainly generate some real air quality benefits.

I'm sure I don't have to remind you of a bicycle fatality that occurred on the Orange Street Bridge in the early 1980's. That fatality was at least partially the result of the bridge geometrics and curb. That problem, and the resultant safety risk, will not go away until this badly needed project gets constructed.

I would also like to commend you for the manner in which you have brought the entire community together in support of this project. Rarely does a major project in Missoula not receive some criticism and have its detractors. Your public involvement program has worked very well.

I surely encourage you to push forward with the critical project.

Sincerely,

James T. Weaver

JAMES T. WEAVER, P.E.
DISTRICT ADMINISTRATOR-MISSOULA

JTW:slj:3

An Equal Opportunity Employer

MISSOULA COUNTY
BOARD OF COUNTY COMMISSIONERS
200 W BROADWAY ST
MISSOULA MT 59802-4292
(406) 721-5700

UG 14 199

BCC 95-415
August 7, 1995

received
8/8/95

Bruce Bender
City Engineer
City of Missoula
435 Ryman
Missoula, MT 59802

Dear Bruce,

We are pleased to write in support of the Orange Street Bridge Project. As you and the engineering firm have kept us, and the residents of Missoula County fully informed as to the progress of this project, we feel like real "stakeholders" in it. We know you are aware of our joint interest and work on the CMAQ proposal and this bridge is an integral part of those efforts to move traffic and mitigate the effects of air congestion.

The current structure is unsafe, crowded, and completely out of date given the rate of growth in Missoula during the past ten years. We stand behind you in these efforts to include the Orange Street Bridge in the CMAQ funding package. We wish you luck, and offer our support in any way you may need us.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

Barbara Evans
Barbara Evans, Chairman

Fern Hart
Fern Hart, Commissioner

Not Available for Signature
Michael Kennedy, Commissioner

BCC/SS:ss

---

MISSOULA COUNTY
MISSOULA CITY-COUNTY HEALTH DEPARTMENT
301 W ALDER ST
MISSOULA, MONTANA 59802-4123
PHONE (406) 523-4755 FAX (406) 523-4781

AUG 17 1995

August 9, 1995

received
8-14-95

Mr. Bruce Bender, City Engineer
City of Missoula
435 Ryman
Missoula MT 59802

Dear Bruce:

Subject: Orange Street Bridge Project

As Director of the Environmental Health Division, Missoula City-County Health Department, I support the Orange Street Bridge Project for the following reasons:

1. The proposed reconstruction of Orange Street Bridge would reduce congestion and carbon monoxide levels at both ends of the bridge.

2. The design will facilitate alternative methods of transportation ie. cyclists and pedestrians which will reduce air pollution from motor vehicles also.

The Missoula City-County Health Department supports the Orange Street Bridge Project and encourages use of CMAQ funds for its construction.

Sincerely,

Jim Carlson
Director Environmental Health

JAN 23 1995

# Bicycle-Pedestrian Advisory Board

Bicycle-Pedestrian Program, City Hall, 435 Ryman, Missoula, MT 59802 • 406/523-4626

1994 -1996
Members
Brenda Desmond
Ralph Frisbey
Hank Harrington
Len LaBuff
Ethel MacDonald
Jim McGrath
Winnie Schreiber
Linda Tracy
John Williams

Ex-Officio
Karen Jaworsky
Sgt. Brent Sells

January 20, 1995

MEMO TO: Missoula City Council
Mayor Dan Kemmis

FROM: Missoula Bicycle/Pedestrian Advisory Board

SUBJECT: Orange Street Bridge and Riverfront Access Project

The City of Missoula, in conjunction with the Montana Department of Transportation, intends to complete a project for the improvement of the Orange Street Bridge and for the development of bicycle/pedestrian access across, and to the riverfront trail system and parks, along the Clark Fork River. The City has contracted with Druyvestein Johnson and Anderson to complete this project.

The Missoula Bicycle/Pedestrian Advisory Board has been following Phase 1 of the project, which has included public involvement and the preparation of an Environmental Assessment. Prior to the public hearing on the project, the Bicycle/Pedestrian Advisory Board would like to make the following recommendations regarding the proposed project. The Board:

1) unanimously supports the project as a solution to help reduce traffic congestion, vehicle emissions, improve pedestrian and bicycle safety, and provide continuation of the Riverfront Trail system with the construction of a pedestrian/bicycle bridge;

2) recommends a thorough analysis of pedestrian facilities from the Clark Fork Riverside Retirement Center to the potential assisted living facility in the old Fox Theatre site (e.g., proper crosswalk facilities, island refuge, etc.);

3) advises maintaining the current traffic use of Cregg Lane, and not developing this access into a future major thoroughfare. With the connection of the Riverfront Trail system and the general increase of bicycles and

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pedestrians in this area with the new bridge, safety will be a priority within this area. Access to Russell Street should remain vis-a-vis Third Street;

4) advises that although there is a great need for this project, California Street Bridge should take priority for beginning construction;

5) recommends that design considerations for bike lanes and the overall trail system include:

   a. proper grading
   b. erosion control
   c. signage
   d. potential for use by individuals with disabilities, and
   e. conflict management between different types of users. Some careful consideration needs to be given to the mixed population (children, cyclists, those with disabilities, elderly) on the trail to bridge access area so that potential conflicts and hazards are avoided; for example, using some kind of texture which would discourage speeding or unsafe behavior by skateboarders or cyclists.

Thank you for this opportunity to comment on the project. We will reiterate our comments at the upcoming hearing. If you have any questions or need clarification on any points, please don't hesitate to contact one of the Board members or the Board chairperson, Jim McGrath, at 549-1543.

cc: Bruce Bender, City Engineer
Mary Jean Gilman, Feet First
Tom Picciano, DJA

United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
100 N PARK, SUITE 320
HELENA MT 59601

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

MAR - 9 1994

RECEIVED
MAR 7 1994
MISSOULA, MONTANA
CITY ENGINEERING

March 3, 1994

Mr. Joseph L. Aldegarie, Director
Department of Public Works
435 Ryman
Missoula, Montana 59802-4297

Dear Mr. Aldegarie:

This responds to your February 8, 1994 letter, concerning your Orange Street Bridge and Riverfront Access Project in Missoula, which requested identification of the threatened and endangered species that should be considered in connection with this project. Your letter also requested other comments we may have.

The Federally-listed endangered and threatened species which occur or may occur within the project area are the bald eagle (Haliaeetus leucocephalus) and peregrine falcon (Falco pereorinus). However, based upon the nature of the proposed work and the locations of the project, we do not expect any project related impacts to threatened or endangered species.

We appreciate your efforts to consider endangered species in your project planning.

Sincerely,

Kemper M. McMaster

Kemper M. McMaster
Field Supervisor
Montana Field Office

cc: Kalispell ES Suboffice
George Chaffee, Natural Resource Services, Box 1559, Eureka, Montana 59917

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MAR 14 1994

United States Department of the Interior

NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
12795 W. ALAMEDA PARKWAY
P.O. BOX 25287
DENVER, COLORADO 80225-0287

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

Vaughn -
FYI

L7619 (RMR-PSE)

MAR 13 1994

RECEIVED
MAR 11 1994
MISSOULA, MONTANA
CITY ENGINEERING

Mr. Joe Aldegarie, P.E.
Director of Public Works
City of Missoula
435 Ryman
Missoula, Montana 59802-4297

Dear Mr. Aldegarie:

We have received your letter regarding the proposal for improvement of the Orange Street Bridgs on the Clark Fork River in Missoula.

From the information that we have, it appears McCormick Park may be impacted. McCormick Park has received assistance from the Land and Water Conservation Fund (L&WCF), and, therefore, the property is subject to the provisions of Section 6(f) of the L&WCF Act, as amended. The provisions of the Act stipulate that changes from outdoor recreation use be approved by the Secretary of the Interior and require the substitution of other properties of at least equal fair market value and reasonably equivalent usefulness and location for the recreation lands to be taken.

The Parks Division of the Montana Department of Fish, Wildlife and Parks has responsibility for administering the L&WCF within the State of Montana. Please maintain contact with the parks division to assure compliance with 6(f) requirements.

Sincerely,

Christine L. Turk
for Michael D. Snyder
Associate Regional Director
Planning and Resource Preservation

cc:
Dr. Arnold Olsen, Administrator, Parks Division, Montana Department of Fish, Wildlife and Parks, 1420 East 6th Avenue, Helena, Montana 59620

MISSOULA PARKS AND RECREATION DEPARTMENT
100 HICKORY • MISSOULA, MT 59801-1859 • (406) 721-7275

2680

UG 17 1995

To: Bruce Bender

From: Jim Van Fossen

Re: Ropes Course

Date: August 14, 1995

Per our conversation this morning, the Parks Department staff is concerned about the potential loss of operation and revenue of our ropes course located at the east end of McCormick Park when the widening of the Orange Street Bridge takes place. I have enclosed a memorandum from Recreation Superintendent Donna Gaukler expressing this concern to Joe Aldergarie dated April 27, 1994. We would like this concern taken into consideration when the project is planned. If you need additional information please contact me at 523-2755.

cc: Vaughn Anderson
Donna Gaukler

AN EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER M/F/V/H

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To: Joe Aldegarie, Public Works Director
From: Donna Gaukler, Recreation Superintendent
Date: April 27, 1994
Re: Orange Street Bridge

I am concerned the Orange Street Bridge project scheduled for the summer of 1996 could have a devastating affect on the new Parks and Recreation Adventure Challenge Ropes Course. Much of the operation of recreation programs and the employment of staff is contingent on revenues for programs.

I have projected revenue of $30,000 for FY'95 and would expect that to increase for FY'96. This sum employs our coordinator and several seasonal staff. In additions, the ropes course is an integral part of our overall program offerings. The assessed value of the course is $15,000. Please keep this amount and the potential lost revenue in mind when negotiating with the State on the Orange Street Bridge project.

I feel it is imperative we plan for the loss of revenues. I prefer to have the ability, option and funding to move the course to another location rather than go a full season without the operation of the course, the lost revenue and the lost program services. Please contact me if you have any questions or can advise me of another course of action. Thank you.

cc: Jim Van Fossen
Doug Waters